Certificate Course in Computer Science and Engineering with Specialization "Database Programming with SQL" Held On 30th October to 3rd November 2017

Department of computer Science & Engineering, KG Reddy College of Engineering & Technology
Chilkur(Village), Moinabad(Mandal), Hyderabad RR Dist-501504

Coordinator

Principal

SUMMARY REPORT OF DATABASE PROGRAMMING WITH SQL

About Course

The certificate course on Database Programming with SQL is concluded its work successfully by department of computer science and engineering (CSE) in KG ready college of Engineering and technology (KGRCET), Hyderabad, Telangana. This course is a forum to bring together students to discuss innovative ideas and diverse topics of this course on next generation of information technologies. Department has taken a new step for students to improve the quality of study through this course and become most wide scale , extensive, spectacular event in computer science engineering. The five days course was held in two locations of the department (a) Department E-learning room for theory class and (b) Department laboratory for practical class.

This course engages students to analyze complex business scenarios and create a data model, a conceptual representation of an organization's information. Participants implement their database design by creating a physical database using SQL. Basic SQL syntax and the rules for constructing valid SQL statements are reviewed. This course culminates with a project that challenges students to design, implement, and demonstrate a database solution for a business or organization.

This course is absolutely practical oriented course which is helped to student for making their carrier through database in any industry. The students of 3rd year 1st semester have been benefited in many ways from this course. More than 80 students have joined in this course as their own interest and completed this course. The trainer taught to students very nice with real time example and sharing his knowledge to develop technical skill in industry.

Scope of the Course

The role of database programming through SQL is to be emphasized in computer science and engineering, to enhance and motivate the new technology for wide range of applications. PL/Scope of course: is a compiler-driven tool that collects data about identifiers in PL/SQL source code at program-unit compilation time and makes it available in static data dictionary views. The collected data includes information about identifier types, usages (declaration, definition, reference, call, assigment) and the location of each usage in the source code. PL/Scope of course: enables the development of powerful and effective PL/Scope of course: source code browsers that increase PL/SQL developer productivity by minimizing time spent browsing and understanding source code. PL/Scope of course: is intended for application developers, and will usually be used in the environment of a development database.

The course contains both theory and practical for applications as well as design methods based on database related topics. The list of topics spans all the areas of the database management and engineering domains. It covered significant recent developments in the field, both of a foundational and applicable character of this course. An important feature of this course is very useful in service carrier. The selected topics of this course helped to make project work. This permits also a rapid and broad dissemination of project and research work.

Objectives of the course

The objective of the course is to bring together experts from academic institute and training institute for sharing of knowledge, expertise and experience in emerging trends related to the computer science and engineering topics. Accessing structured data with SQL is quite different from the full text search of documents on the Web. Structured data in the relational model means data that can be represented in tables -- rows and columns. Each row in a table represents a different object, and the columns represent various "attributes" of the object. The columns have names and integrity constraints that specify valid values.

Since the column values are named and are represented in a consistent format, you can select rows very precisely, based on their contents. This is especially helpful in dealing with numeric data. You can also join together data from different tables, based on matching column values. You can do useful types of analysis, listing objects that are in one table and missing (or present, or have specific attributes) from a related table. You can extract from a large table precisely those rows of interest, regrouping them and generating simple statistics on them. The course covered all topics of database management system as well as engineering system related to computer science engineering. Broad and individual topics are mentioned in syllabus but not limited. Specific tracks of the course had been taken for different session of the day. As a result many keynote, tutorial and technical sessions have been prepared in accordance with course scope to discuss the challenges, opportunities and problems of application of computer science engineering in various fields.

Output

This course was not only shared the knowledge among students but also tied up with expert for upcoming course. SQL, Structured Query Language, is a programming language designed to manage data stored in relational databases. SQL operates through simple, declarative statements. This keeps data accurate and secure, and it helps maintain the integrity of databases, regardless of size. The main outputs are mentioned below:

- ❖ The expert shared his knowledge among students.
- ❖ Students learned from this course and tried to use the techniques for their project as well as research work.
- ❖ Students interact with expert to gain their additional knowledge for future research work.
- ❖ Department tried to do their collaborative research work on this course with university as well as industries.
- ❖ It was created different domains of research field from this course for possible topic of computer science engineering.
- ❖ It helped to make industrial project.

Summary of Participants

a) Number of students attended this course:
b) Number of students attended written exam:
c) Number of students qualified the exam:

Time: 09:00 AM to 11:00 AM

Inauguration of certificate course

The first day of certificate course started with Welcoming and Opening Ceremony at the KGRCET conference Hall. The following dignitaries were representatives of the certificate course who were addressed and pointed out the importance on course with short welcoming speeches.

Welcome addressed by Mr. M. Saidi Reddy, HOD, CSE, KGRCET
About the certificate course by Principal Dr. R. S. Jahagirdar, KGRCET.
Importance of this course by expert trainer Mr. Vamshi, Trainer of Coign
Interaction with 3rd year 1st semester students

Time: 11:10 AM to 04:15 PM

Introduction History of the Database

A Database Management System allows a person to organize, store, and retrieve data from a computer. It is a way of communicating with a computer's "stored memory." In the very early years of computers, "punch cards" were used for input, output, and data storage. Punch cards offered a fast way to enter data, and to retrieve it. Herman Hollerith is given credit for adapting the punch cards used for weaving looms to act as the memory for a mechanical tabulating machine, in 1890. Much later, databases came along.

Databases (or DBs) have played a very important part in the recent evolution of computers. The first computer programs were developed in the early 1950s, and focused almost completely on coding languages and algorithms. At the time, computers were basically giant calculators and data (names, phone numbers) was considered the leftovers of processing information. Computers were just starting to become commercially available, and when business people started using them for real-world purposes, this leftover data suddenly became important.

Enter the Database Management System (DBMS). A database, as a collection of information, can be organized so a Database Management System can access and pull specific information. In 1960, Charles W. Bachman designed the Integrated Database System, the "first" DBMS. IBM, not wanting to be left out, created a database system of their own, known as IMS. Both database systems are described as the forerunners of navigational databases.

By the mid-1960s, as computers developed speed and flexibility, and started becoming popular, many kinds of general use database systems became available. As a result, customers demanded a standard be developed, in turn leading to Bachman forming the

Database Task Group. This group took responsibility for the design and standardization of a language called Common Business Oriented Language (COBOL). The Database Task Group presented this standard in 1971, which also came to be known as the "CODASYL approach."

The CODASYL approach was a very complicated system and required substantial training. It depended on a "manual" navigation technique using a linked data set, which formed a large network. Searching for records could be accomplished by one of three techniques:

- Using the primary key (also known as the CALC key)
- Moving relationships (also called sets) to one record from another
- Scanning all records in sequential order

Eventually, the CODASYL approach lost its popularity as simpler, easier-to-work-with systems came on the market

RDBM Systems were an efficient way to store and process structured data. Then, processing speeds got faster, and "unstructured" data (art, photographs, music, etc.) became much more common place. Unstructured data is both non-relational and schema-less, and Relational Database Management Systems simply were not designed to handle this kind of data.

NoSQL

NoSQL ("Not only" Structured Query Language) came about as a response to the Internet and the need for faster speed and the processing of unstructured data. Generally speaking, NoSQL databases are preferable in certain use cases to relational databases because of their speed and flexibility. The NoSQL model is non-relational and uses a "distributed" database system. This non-relational system is fast, uses an ad-hoc method of organizing data, and processes high-volumes of different kinds of data.

NoSQL Data Distribution

Hardware can fail, but NoSQL databases are designed with a distribution architecture that includes redundant backup storage of both data and function. It does this by using multiple nodes (database servers). If one, or more, of the nodes goes down, the other nodes can continue with normal operations and suffer no data loss. When used correctly, NoSQL databases can provide high performance at an extremely large scale, and never shut down. In general, there are four kinds of NoSQL databases, with each having specific qualities and characteristics.

Document Stores

A Document Store (often called a document-oriented database), manages, stores, and retrieves semi-structured data (also known as document-oriented information). Documents can be described as independent units that improve performance and make it easier to spread data across a number of servers. Document Stores typically come with a powerful query engine and indexing controls that make queries fast and easy. Examples of Document Stores are: Mongo DB, and Amazon Dynamo DB

Column Stores

A DBMS using columns is quite different from traditional relational database systems. It stores data as portions of columns, instead of as rows. The change in focus, from row to a column, lets column databases maximize their performance when large amounts of data are stored in a single column. This strength can be extended to data warehouses and CRM applications. Examples of column-style databases include Cloudera, Cassandra, and HBase (Hadoop based).

Key-value Stores

A key-value pair database is useful for shopping cart data or storing user profiles. All access to the database is done using a primary key. Typically, there is no fixed schema or data model. The key can be identified by using a random lump of data. Key-value stores "are not" useful when there are complex relationships between data elements or when data needs to be queried by other than the primary key. Examples of key-value stores are: Riak, Berkeley DB, and Aerospike.

An element can be any single "named" unit of stored data that might, or might not, contain other data components.

Graph Data Stores

Location aware systems, routing and dispatch systems, and social networks are the primary users of Graph Databases (also called Graph Data Stores). These databases are based on graph theory, and work well with data that can be displayed as graphs. They provide a very functional, cohesive picture of Big Data.

It differs from relational databases, and other NoSQL databases, by storing data relationships *as actual relationships*. This type of storage for relationship data results in fewer disconnects between an evolving schema and the actual database. It has interconnected elements, using an undetermined number of relationships between them. Examples Graph Databases are: Neo4j, GraphBase, and Titan.

Polyglot Persistence

Polyglot Persistence is a spin-off of "polyglot programming," a concept developed in 2006 by Neal Ford. The original idea promoted applications be written using a mix of languages, with the understanding that a specific language may solve a certain kind of problem easily, while another language would have difficulties. Different languages are suitable for tackling different problems.
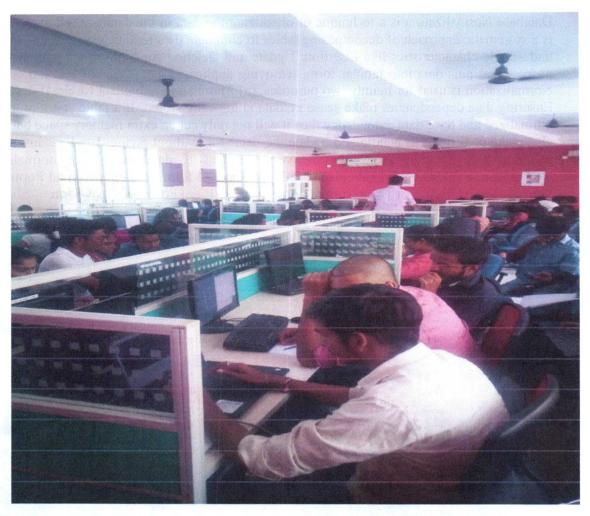
Day-2

(31-10-17)

Data modelling is the process of creating a data model for the data to be stored in a Database. This data model is a conceptual representation of (a) Data objects, (b) The associations between different data objects, (c) The rules. Data modelling helps in the visual representation of data and enforces business rules, regulatory compliances, and government policies on the data. Data Models ensure consistency in naming conventions, default values, semantics, and security while ensuring quality of the data. Data model emphasizes on what data is needed and how it should be organized instead of what operations need to be performed on the data. Data Model is like architect's building plan which helps to build a conceptual model and set the relationship between data items. The two types of Data Models techniques are (a) Entity Relationship (E-R) Model, (b) UML (Unified Modelling Language)

The primary goal of using data model are:

- Ensures that all data objects required by the database are accurately represented. Omission of data will lead to creation of faulty reports and produce incorrect results.
- A data model helps design the database at the conceptual, physical and logical levels.
- Data Model structure helps to define the relational tables, primary and foreign keys and stored procedures.
- It provides a clear picture of the base data and can be used by database developers to create a physical database.
- It is also helpful to identify missing and redundant data.
- Though the initial creation of data model is labor and time consuming, in the long run, it makes your IT infrastructure upgrade and maintenance cheaper and faster.

Types of Data Models

There are mainly three different types of data models:

1. Conceptual: This Data Model defines WHAT the system contains. This model is typically created by Business stakeholders and Data Architects. The purpose is to organize, scope and define business concepts and rules.
2. Logical: Defines HOW the system should be implemented regardless of the DBMS. This model is typically created by Data Architects and Business Analysts. The purpose is to developed technical map of rules and data structures.
3. Physical: This Data Model describes HOW the system will be implemented using a specific DBMS system. This model is typically created by DBA and developers. The purpose is actual implementation of the database.

Day-3

(1-11-17)

Database Normalization is a technique of organizing the data in the database. Normalization is a systematic approach of decomposing tables to eliminate data redundancy (repetition) and undesirable characteristics like Insertion, Update and Deletion Anamolies. It is a multi-step process that puts data into tabular form, removing duplicated data from the relation tables. Normalization is used for mainly two purposes, (a) Eliminating redundant (useless) data, (b) Ensuring data dependencies make sense i.e data is logically stored. If a table is not properly normalized and have data redundancy then it will not only eat up extra memory space but will also make it difficult to handle and update the database, without facing data loss. Insertion, updation and deletion anamolies are very frequent if database is not normalized. Normalization rules are divided into the following normal forms: (a) First Normal Form, (b) Second Normal Form, (c) Third Normal Form, (d) BCNF, (e) Fourth Normal Form.

Day-4

(2-11-17)

In this course we look at an outline of the stages involved in the development of a database. We consider the broader issue of how to decide what should be in a database and how to structure the tables that should be included. Our aim is to give you a basic development method so that you can see how a basic database system is developed. We don't argue that this specific method is the most applicable to any given situation – however, we do consider that this method is straightforward and will allow you to contextualise or, by comparison, consider a range of database development techniques.

Before we consider the development method in more detail let's discuss why we need to take a formal approach to database development. After all, it is quite simple to use structured query language (SQL) CREATE TABLE statements to define tables, or to use the facilities of a database tool to define them for you. Once developed, the tables can be manipulated and

displayed in many different ways, again using SQL statements, a database tool or an application development tool. However, uncontrolled ad hoc creation of tables by end users leads to an unmanageable and unusable database environment, and can result in the inclusion of multiple copies of potentially inconsistent data. In effect, this can create islands of data within which the end users cannot find the data that they require.

SQL is a special kind of computer language used for relational databases. These initials originated from 'structured query language'. Although this phrase is no longer used the initials SQL still are. SQL is an essential part of the practical understanding of relational databases, but we are only concerned that you appreciate its role in defining and accessing a database.

To recognise why methodical development is an issue, let's look at a very simple example. A hotel provides its clients with accommodation, food and drink and wants to record what each client spends for each cost category so that, as they leave, each client is presented with an itemised bill for all they have spent.

The problem is that there is not just one way in which we can choose tables for this purpose. We can suggest three alternative ways of satisfying the basic requirement of being able to record the data that the hotel has specified.

Day-5

(3-11-17)

Including the GROUP BY clause limits the window of data processed by the aggregate function. This way we get an aggregated value for each distinct combination of values present in the columns listed in the GROUP BY clause. The number of rows we expect can

be calculated by multiplying the number of distinct values of each column listed in the GROUP BY clause. In this case, if the rows were loaded randomly we would expect the number of distinct values for the first three columns in the table to be 2, 5 and 10 respectively. So using the fact_1_id column in the GROUP BY clause should give us 2 rows.

In addition to the regular aggregation results we expect from the GROUP BY clause, the ROLLUP extension produces group subtotals from right to left and a grand total. If "n" is the number of columns listed in the ROLLUP, there will be n+1 levels of subtotals.

Looking at the output in a SQL*Plus or a grid output, you can visually identify the rows containing subtotals as they have null values in the ROLLUP columns. Obviously, if the raw data contains null values, using this visual identification is not an accurate approach. In addition to the subtotals generated by the ROLLUP extension, the CUBE extension will generate subtotals for all combinations of the dimensions specified. If "n" is the number of columns listed in the CUBE, there will be 2^n subtotal combinations.

It can be quite easy to visually identify subtotals generated by rollups and cubes, but to do it programatically you really need something more accurate than the presence of null values in the grouping columns. This is where the GROUPING function comes in. It accepts a single column as a parameter and returns "1" if the column contains a null value generated as part of a subtotal by a ROLLUP or CUBE operation or "0" for any other value, including stored null values.

It's possible to write queries that return the duplicate subtotals, which can be a little confusing. The GROUP_ID function assigns the value "0" to the first set, and all subsequent sets get assigned a higher number. The following query forces duplicates to show the GROUP_ID function in action.

CIRCULAR

All the students of III-Year I-semester B.Tech CSE are here by instructed to enroll for the certification course on "Database Programming with SQL", which is offered by KG Reddy college of Engineering and Technology from 30/10/2017 to 03/11/2017. Interested students are instructed to contact Mr. M. Rambabu for completing their registration before 29/10/2017.

HOD

HEAD
DEPT. OF COMPUTER SCIENCE & ENGINEERING
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Principal

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

CERTIFICATE COURSE ON DATABASE PROGRAMMING WITH SQL

SCHEDULE

Day	Date	Timings	Topic name
1	30-10-17	09:00 to 11:00	Inauguration of Certificate Course on database programming with SQL
		11:10 to 01:00	Introduction History of the Database
		01:45 to 02:50	Major Transformations in Computing
		02:50 to 04:15	Entities and Attributes Conceptual and Physical Models
2	31-10-17	09:00 to 11:00	Entities, Instances, Attributes, and Identifiers
		11:10 to 01:00	Entity Relationship Modeling and ERDs
		01:45 to 02:50	UIDs and Normalization Artificial, Composite, and Secondary UIDs
		02:50 to 04:15	Normalization and First Normal Form
3	01-11-17	09:00 to 11:00	Second Normal Form Third Normal Form
		11:10 to 01:00	Mapping Introduction to Relational Database Concepts
		01:45 to 02:50	Basic Mapping: The Transformation Process
		02:50 to 04:15	Relationship Mapping Subtype Mapping
4	02-11-17	09:00 to 11:00	Creating Database Projects System Development Life Cycle
		11:10 to 01:00	Project Overview and Getting Started
		01:45 to 02:50	Presentation Project Management
		02:50 to 04:15	Final Presentation Components
5	03-11-17	09:00 to 11:00	Group Functions Oracle Nonequijoins and Outer Joins
		11:10 to 01:00	Using Group By and Having Clauses
		01:45 to 02:50	Using Rollup and Cube Operations, and
		02:50 to 04:15	Grouping Sets Using Set Operators

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
CERTIFICATE PROGRAM ON DATABASE PROGRAMMING WITH SQL

ATTENDANCE SHEET

YEAR: III   SEM: I   SEC:A   DATE: 30/10/2017 TO 03/11/2017

S.NO	ROLL NO	NAME	DAY1	DAY2	DAY3	DAY4	DAY5
1	15QM1A0502	ANNAMONI AKSHAY KUMAR	Aksh	Ak	Ak	Ak	Ak
2	15QM1A0503	ANNU DEEPIKA	Deepika	Deepika	Deepika	Deepika	Deepika
3	15QM1A0505	AVULA SIVA PRASAD	P	P	P	P	P
4	15QM1A0506	B CHANDRASHEKAR	Sha	Sha	Sha	Sha	Sha
5	15QM1A0507	B JHANSI LAKSHMI	Lakshmi	Lakshmi	Lakshmi	Lakshmi	Lakshmi
6	15QM1A0508	B KOMAL	komal	komal	komal	komal	komal
7	15QM1A0509	BALLA VINAY YADAV	Yad	Yad	Yad	Yad	Yad
8	15QM1A0510	BATCHU NEERAJA	Nee	Nee	Nee	Nee	Nee
9	15QM1A0511	BENDARAPU RAM BHARATH	Bud	Bud	Bud	Bud	Bud
10	15QM1A0513	BYREDDY JYOTHI PRIYANKA	Jyothi	Jyothi	Jyothi	Jyothi	Jyothi
11	15QM1A0514	C SAMARA SIMHA REDDY	Simha	Simha	Simha	Simha	Simha
12	15QM1A0515	CHALLA ADITHYA	Adhy	Adhy	Adhy	Adhy	Adhy
13	15QM1A0516	CHEAGURI SAI YESH YESWINI	Yesh	Yesh	Yesh	Yesh	Yesh
14	15QM1A0517	D SHARAN RAJ GOUD	Raj	Raj	Raj	Raj	Raj
15	15QM1A0518	DODDI SWETHA	Swetha	Swetha	Swetha	Swetha	Swetha
16	15QM1A0519	DURGAM LAXMAN	Lax	Lax	Lax	Lax	Lax
17	15QM1A0520	DURGAM RAMU	Ram	Ram	Ram	Ram	Ram
18	15QM1A0521	ELUGALA NITHIN BABU	Babu	Babu	Babu	Babu	Babu
19	15QM1A0522	GADHIRAJU SRAVANI	Sran	Sran	Sran	Sran	Sran
20	15QM1A0523	GAJJALA SHIVA DATTA	Datta	Datta	Datta	Datta	Datta
21	15QM1A0524	GANGALA PRIYANKA REDDY	Priyanka	Priyanka	Priyanka	Priyanka	Priyanka
22	15QM1A0525	GATLA SURAJ KUMAR	Suraj	Suraj	Suraj	Suraj	Suraj
23	15QM1A0526	GATTU SPANDANA	Spandan	Spandan	Spandan	Spandan	Spandan
24	15QM1A0527	GAURAV DAYAMA	Gaurav	Gaurav	Gaurav	Gaurav	Gaurav
25	15QM1A0528	GELLI MOUNIKA	Mounika	Mounika	Mounika	Mounika	Mounika
26	15QM1A0529	GODALA SAI NIKHIL REDDY	Sai	Sai	Sai	Sai	Sai
27	15QM1A0532	GOUNDLA NAVEEN KUMAR	Nav	Nav	Nav	Nav	Nav
28	15QM1A0533	GURRALA HAREESHWAR REDDY	Ba	Ba	Ba	Ba	Ba
29	15QM1A0534	K SADANA	Sadhan	Sadhan	Sadhan	Sadhan	Sadhan

S.NO	ROLL NO	NAME	DAY1	DAY2	DAY3	DAY4	DAY5
30	15QM1A0535	KANDAKATLA BHARATH REDDY					
31	15QM1A0536	KATHROTIYA AVANI PATEL	Avani	Avani	Avani	Avani	Avani
32	15QM1A0537	KATTA ARUN TEJA					
33	15QM1A0538	KAVALI AKHIL YADAV	Yad	Yad	Yad	Yad	Yae
34	15QM1A0539	KAVIDI DEVI HARI KANTH	Kanth	Kanth	Kanth	Kanth	Kanth
35	15QM1A0540	KETHIREDDU DAVAN	Davan	Davan	Davan	Davan	Dan
36	15QM1A0541	KODURI SAI KUMAR	Sai	Sai	Sai	Sai	Sai
37	15QM1A0542	KOTLA MANIDEEPAK	Mani	Mani	Mani	Mani	Mani
38	15QM1A0544	KRISHNAGIRI TUPPAL VENUGOPALAN	Tuppal	Tuppal	Tuppal	Tuppal	Tuppal
39	15QM1A0546	KUNTLOOR CHANDRA SHEKAR REDDY	Chandra	Chandra	Chandra	Chandra	Chandra
40	15QM1A0547	LOKA DIXITH REDDY	DRR	DRR	DRR	DRR	DRg
41	15QM1A0548	M VIKRAM	Vikram	Vikram	Vikram	Vikram	Vikram
42	15QM1A0549	MADISHETTIWAR SUCHITRA SRINIVAS	Srinivas	Srinivas	Srinivas	Srinivas	Srinivas
43	15QM1A0550	MALGA KARTHIK	Malga	Malga	Malga	Malga	Malga
44	15QM1A0551	MAMIDI SUMA	Suma	Suma	Suma	Suma	Suma
45	15QM1A0552	MEERAMPALLY KARTHIK	Karthi	Karthik	Karthik	Karthik	Karthik
46	15QM1A0553	MENTE BILWANI LAKSHMI KRANTHI	Mente	Mente	Mente	Mente	Mente
47	15QM1A0554	R SEVITHA	Sevitha	Sevitha	Sevitha	Sevitha	Sevi
48	15QM1A0556	SAHERI PAVANI	Pavani	Pavani	Pavani	Pavani	Pavani
49	15QM1A0557	TIRUNAGARI SAI SRUJANA	Srujana	Srujana	Srujana	Srujana	Srujana
50	15QM1A0558	TUPPARI LAXMI PRASANNA	Laxmi	Laxmi	Laxmi	Laxmi	Laxmi.
51	15QM1A0560	YASHWANTH GADDAM					

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
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ATTENDANCE SHEET

YEAR: III   SEM: I   SEC:B   DATE: 30/10/2017 TO 03/11/2017

S.NO	ROLL NO	NAME	DAY1	DAY2	DAY3	DAY4	DAY5
1	14QM1A0539	KAMBHAMPATI KRISHNA KANTH					
2	14QM1A0543	KATRAVATH SURESH NAIK					
3	14QM1A0554	KUNDELA GANGADHAR					
4	14QM1A0559	MADAKA PRASHANTH					
5	14QM1A0569	NIRWAN VIJAY WARGIYA					
6	14QM1A0596	T RAJA MALLA REDDY					
7	15QM1A0561	DHEERAJ KUMAR					
8	15QM1A0562	G VAISHNAVI					
9	15QM1A0563	GOGINENI VINEETH CHOUDARY					
10	15QM1A0564	GUMPU SHRAVANI					
11	15QM1A0565	JUKANTI SANDHYA					
12	15QM1A0566	KADULURI VENKATA CHARAN REDDY					
13	15QM1A0567	MOHAMMAD AMER SOHEL					
14	15QM1A0569	MOHAMMED SHAIBAZ					
15	15QM1A0570	MOHD ZABI KHAN					
16	15QM1A0571	MOMULA SRIKANTH REDDY					
17	15QM1A0572	MOOSANI MURALIDHAR REDDY					
18	15QM1A0574	N VIKRAM CHANDRA GOUD					
19	15QM1A0575	NAJEEB PASHA					
20	15QM1A0576	NEELI VENKATESH					
21	15QM1A0577	NEHA MARUTI PATIL					
22	15QM1A0578	NOOTHPALLY UTTEJ REDDY					
23	15QM1A0579	PADAMATA ANJANEYA PRASAD					
24	15QM1A0580	PARVEDA MOUNESH					
25	15QM1A0581	PERAM TAGORE FINNY					
26	15QM1A0582	PERAVENA AKHIL					
27	15QM1A0583	PHOOLDANDIKAR NEHARIKA					

S.NO	ROLL NO	NAME	DAY1	DAY2	DAY3	DAY4	DAY5
28	15QM1A0584	POLANKI VAMSI DINESH					
29	15QM1A0585	POREDDY NAVANEETH REDDY					
30	15QM1A0586	PRADEEP YADAV					
31	15QM1A0588	RAJAPURAM TEJASREE REDDY					
32	15QM1A0589	RAJEEV JENA					
33	15QM1A0590	G PRAJWALITHA GOUD					
34	15QM1A0591	RAJIV JENA					
35	15QM1A0592	RAYALA ALEKHYA					
36	15QM1A0594	S REVANTH REDDY					
37	15QM1A0595	S THRISHUL KUMAR GOUD					
38	15QM1A0596	SAMA ABHISHEK REDDY					
39	15QM1A0597	SAMA VISHAL REDDY					
40	15QM1A0599	SHAIK TASLIMA NASREEN					
41	15QM1A05A0	SINGANI ANILKUMAR					
42	15QM1A05A2	SULLOLA ANUSHA REDDY					
43	15QM1A05A3	SUMITH KUMAR SINGH					
44	15QM1A05A4	SYED ABDUL BASITH					
45	15QM1A05A5	SYED ABDUL HAMEED					
46	15QM1A05A6	SYED AZMATHULLAH HUSSAIN					
47	15QM1A05A7	TALARAPU PRASHANTHI					
48	15QM1A05A8	THADURI PAVAN					
49	15QM1A05A9	THAKUR SAHIL SINGH					
50	15QM1A05B0	THANNEERU GOPI					
51	15QM1A05B1	THEEGELA RACHANA					
52	15QM1A05B2	TIWARI DURGESHWARI					
53	15QM1A05B3	VANAMAMULAI SRINIVASA VARUN					
54	15QM1A05B4	VISHAL JADAV					
55	15QM1A05B5	YERUVA VIJAY CYRIL					
56	15QM1A05B7	SATTI LOKNATH REDDY					
57	15QM1A05B8	B. NIKUNJ					
58	16QM5A0501	E KUMAR GOUD					

HOD

NAME __Adithya_____ HALL TICKET NO | 1 | 5 | Q | M | 1 | A | 0 | 5 | 1 | 5 |

Answer all the questions. All questions carry equal marks. Time: 30min. 30 marks.

I choose correct alternative:

1. Which of the following is used to access the database server at the time of executing the program and get the data from the server accordingly? [B]

a) Embedded SQL   b) Dynamic SQL

c) SQL declarations   d) SQL data analysis

2. Which of the following header must be included in java program to establish database connectivity using JDBC ? [A]

a) Import java.sql.*;   b) Import java.sql.odbc.jdbc.*;

c) Import java.jdbc.*;   d) Import java.sql.jdbc.*;

3. DriverManager.getConnection(_____ , _____ , _____) [B]

What are the two parameters that are included?

a) URL or machine name where server runs, Password, User ID

b) URL or machine name where server runs, User ID, Password

c) User ID, Password, URL or machine name where server runs

d) Password, URL or machine name where server runs, User ID

4. Which of the following invokes functions in sql? [C]

a) Prepared Statements   b) Connection statement

c) Callable statements   d) All of the mentioned

5. Which of the following function is used to find the column count of the particular resultset? [A]

a) getMetaData()   b) Metadata()

c) getColumn()   d) get Count()

6. Which of the following is a following statement is a prepared statements? [A]

a) Insert into department values(?,?,?)

b) Insert into department values(x,x,x)

c) SQLSetConnectOption(conn, SQL AUTOCOMMIT, 0)

d) SQLTransact(conn, SQL ROLLBACK)

7. Which of the following is used as the embedded SQL in COBOL?　　　　[B]

a) EXEC SQL <embedded SQL statement >;

b) EXEC SQL <embedded SQL statement > END-EXEC

c) EXEC SQL <embedded SQL statement >

d) EXEC SQL <embedded SQL statement > END EXEC;

8. Which of the following is used to distinguish the variables in SQL from the host language variables?

a) .　　b) –　　c) :　　d) ,　　　　　　　　　　　　[B]

9. The update statement can be executed in host language using　　　[C]

a) EXEC SQL update c;

b) EXEC SQL update c into :si, :sn;

c) **EXEC SQL   UPDATE** instructor   **SET** salary = salary + 100   **WHERE CURRENT OF** c;

d) EXEC SQL update END-SQL

10. Which of the following is used to **access large objects** from a database ?　　[D]

a) setBlob()　　b) getBlob()　　c) getClob()　　d) all of the mentioned

11. **SELECT** name ____ instructor name, course id **FROM** instructor, teaches **WHERE** instructor.ID= teaches.ID;

Which keyword must be used here to **rename the field** name?　　　　[C]

a) From　　b) Rename　　c) As　　d) Join

12. **SELECT * FROM** employee **WHERE** dept_name="Comp Sci";

In the SQL given above there is an **error** . Identify the error.　　　　[C]

a) Dept_name　b) Employee　c) "Comp Sci" d) From

13. **SELECT** emp_name **FROM** department **WHERE** dept_name **LIKE** ' _____ Computer Science';

Which one of the following has to be **added into the blank** to select the dept_name which has Computer Science as its ending string?　　　　　　　　　[B]

a) %　　b) _　　c) ||　　d) $

14. '_ _ _' matches any string of _____ three characters. '_ _ _ %' matches any string of at _____ three characters.　　　　　　　　　　　　　　　　[A]

a) Atleast, Exactly　　b) Exactly, Atleast　　c) Atleast, All　d) All, Exactly

15. **SELECT** name **FROM** instructor **WHERE** dept name = 'Physics' **ORDER BY** name;

a) Descending b) Any c) Same   d) Ascending

16. **SELECT * FROM** instructor **ORDER BY** salary _____ , name _____ ;

To display the salary from greater to smaller and name in ascending order which of the following options should be used?   [C]

a) Ascending, Descending   b) Asc, Desc   c) Desc, Asc   d) Descending, Ascending

17. advertisement

SELECT name **FROM** instructor **WHERE** salary <= 100000 **AND** salary >= 90000;

This query can be replaced by which of the following ?   [A]

a)**SELECT** name **FROM** instructor **WHERE** salary **BETWEEN** 90000 **AND** 100000;

b)**SELECT** name **FROM** employee **WHERE** salary <= 90000 **AND** salary>=100000;

c)**SELECT** name **FROM** employee **WHERE** salary **BETWEEN** 90000 **AND** 100000;

d)**SELECT** name **FROM** instructor **WHERE** salary **BETWEEN** 100000 **AND** 90000;

18.SELECT instructor.* FROM instructor, teaches WHERE instructor.ID= teaches.ID;

This query does which of the following operation?   [B]

a) All attributes of instructor and teaches are selected

b) All attributes of instructor are selected on the given condition

c) All attributes of teaches are selected on given condition

d) Only the some attributes from instructed and teaches are selected

19. In SQL the spaces at the end of the string are removed by _____ function.   [C]

a) Upper   b) String   c) Trim   d) Lower

20. _____ operator is used for appending two strings.   [C]

a) &   b) %   c) || d) _

21. Which is the main relation which is used in the university database which is referenced by all other relation of the university?   [C]

a) Teaches   b) Course   c) Department   d) Section

22. The department relation has the an entry budget whose type has to be replaced by

a) Varchar (20)   b) Varchar2 (20)   c) Numeric (12,2)   d) Numeric   [C]

23. In the course relation, the title field should throw an error in case of any missing title. The command to be added in title is   [B]

a) Unique   b) Not null   c) 0   d) Null

24. In the above DDL command the foreign key entries are got by using the keyword
a) References   b) Key reference

c) Relating   d) None of the mentioned   [A]

25. Identify the error in the section relation
a) No error   b) Year numeric (4,0) c) Building varchar (15)   d) Sec_id varchar (8)   [A]

26. The following entry is given in to the instructor relation .
(100202,Drake,Biology,30000)

Identify the output of the query given
a) Row(s) inserted   b) Error in ID of insert   [B]

c) Error in Name of insert   d) Error in Salary of the insert

27. Which of the following can be used as a primary key entry of the instructor relation.
a) DEPT_NAME   b) NAME   c) ID   d) All of the mentioned   [C]

28. In the section relation which of the following is used as a foreign key?
a) Course_id   b) Course_id,sec_id   c) Room_number   d) Course_id,sec_id,room_number   [A]

29. In order to include an attribute Name to the teaches relation which of the following command is used?

a) Alter table teaches include Name;   b) Alter table teaches add Name;   [D]

c) Alter table teaches add Name varchar;   d) Alter table teaches add Name varchar(20);

30. To replace the relation section with some other relation the initial step to be carried out is
a) Delete section;   b) Drop section;

c) Delete from section;   d) Replace section new_table ;   [B]

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CERTIFICATE

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Registration No: 15QM1A0574

has successfully completed the prescribed requirements for the award of certificate course on **"Database Programming with SQL"** conducted by Computer Science and Engineering held in month of October and November from 30/10/2017 to 03/11/2017 in the academic year 2017-2018.

Date: 07/11/2017

Course Coordinator

PRINCIPAL
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