# Course Name: PG-DAC Batch: Aug 2024

# Module Name: Database Technologies [Set 1] Date: \_\_\_\_\_\_\_\_\_\_\_\_\_

# Student Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Max Marks: 40 Marks

# PRN: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Duration: 2 Hours

**Section A: Question 1 to 10 - 2 Marks each**

1) Display the second lowest marks scored by any student in 10th.

2) Display all job names with 2nd highest salary for every job (use EMP table) .

3) Print the date, One month and 15 days after today’s date.

4) Display all student information whose name starts with 'S' and its length of name is 6 or more char.

5) Display all student details whose DoB is same as studentID 7.

6) Count how many nameFirst are present in the student table whose name starts with the letter ‘S’.

7) Display all students whose DoB in the 2nd quarter of an year.

8) Display student\_phone number in the following format “\*\*\*\*\*\*0011” for all students whose phone numbers isActive.

9)  Write a query to display 2ND highest salary for each job types (use EMP table)

10) Display student name have done ‘BE’ from ‘Harvard University’ and secured marks more than 70.

**Section B: 10 Marks**

Write a function names **myAutoNumber** to return auto generate string of 6 characters and store them in table X(id varchar(100)). If the auto-generated string is already present in the base table X, then return ‘String Found’ using global variable

# Evaluation of Lab Exam should be based on the following criteria:

|  |  |  |  |
| --- | --- | --- | --- |
| **Criteria** | **Details** | **Max Marks** | **Marks Obtain** |
| Algorithm | Documentation of Algorithm and Flowchart | 30 |  |
| Program adheres to the algorithm and flowchart |
| Efficiency | Program is using only the required number of variables  /conditions/loops/pointers etc and is optimal |
| Correctness | The program produces desired output for a given input |
| The program handles all valid and Invalid inputs |
| Software Engineering Principles | The program has meaning variable/function names |
| The program is commented properly (At least 20% of the code should be commented) |
| Viva |  | 10 |  |
|  | ***Total Marks*** | **40** |  |

## \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

## Signature of Student Signature of Evaluator Signature of Coordinator

# Course Name: PG-DAC Batch: Aug 2024

# Module Name: Database Technologies [Set 2] Date: \_\_\_\_\_\_\_\_\_\_\_\_\_

# Student Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Max Marks: 40 Marks

# PRN: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Duration: 2 Hours

**Section A:  Question no 1 to 10 : 2 Marks**

1)  List nameFirst, nameLast, and emailID of student whose studentID is not 5, 10, 15, display first 7 rows only.

2)  List all student details and student\_qualification whose college is in ‘New York’.

3)  List all student details and student\_qualification whose have done “BE” from “Florida” college.

4)  Write a query to create new table by the your name having the following attributes and constraints (\_id int auto increment, ename varchar(20) with not null, phone int with unique, salary int with salary more than 5000, and city varchar(20) with default value as ‘Baroda’)

5) Find the student details that have scored highest marks in 'BE'.

6) Write a query to count total student who have done 'BE' and year of passing is 2014.

7) Display all students records whose nameFirst starts with ‘S’ or ‘R’ and its length is 6 char.

8) Write a query to fetch first 4 records from Student Table, whose have done “BE” arrange the records in ascending order of nameFirst.

9) Write a query to display the student details along with their phone number who have more than one phone.

10) Write a query to display all students who are born on ‘Monday’.﻿

**Section B:  10 Marks﻿**

Write a Stored Trigger to add record in student table. If the entered nameFirst is passed in lower case convert them in capital case and if DoB>NOW() the recode must not be inserted in the student base table.

# Evaluation of Lab Exam should be based on the following criteria:

|  |  |  |  |
| --- | --- | --- | --- |
| **Criteria** | **Details** | **Max Marks** | **Marks Obtain** |
| Algorithm | Documentation of Algorithm and Flowchart | 30 |  |
| Program adheres to the algorithm and flowchart |
| Efficiency | Program is using only the required number of variables  /conditions/loops/pointers etc and is optimal |
| Correctness | The program produces desired output for a given input |
| The program handles all valid and Invalid inputs |
| Software Engineering Principles | The program has meaning variable/function names |
| The program is commented properly (At least 20% of the code should be commented) |
| Viva |  | 10 |  |
|  | ***Total Marks*** | **40** |  |

## \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

## Signature of Student Signature of Evaluator Signature of Coordinator

# Course Name: PG-DAC Batch: Aug 2024

# Module Name: Database Technologies [Set 3] Date: \_\_\_\_\_\_\_\_\_\_\_\_\_

# Student Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Max Marks: 40 Marks

# PRN: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Duration: 2 Hours

**Section A: Question no 1 to 10: 2 Marks**

1. Write a query to fetch ALTERNATE records from an EMP table. **(only ODD Records).**

2. Display the student detail that has joined the same batch of the student ‘Saleel’.

3. Display all students who have taken admission in more than 2 batches.

4. Display all courses where least number of students has taken the admission.

5. Display the 3rd highest salary from EMP table(use EMP table).

6. Write a query to count total student who have done 'BE' and year of passing is 2017.

7. Select all students records whose nameFirst starts with 'S' and its length is 6 char.

8. Write a query to display all the employee who is having same salaries (use EMP table).

9. Write a query to display the student details along with their phone number who have more than one phone.

10.  Write a query to display all students who are born in the year 1984.

**Section B:  10 Marks**

Write **studentSearch** Stored Procedure. Pass studentID as parameter, if the entered studentID is present in the STUDENT table then display his qualification details **(Using cursor)**. If the studentID is not present then display the message **“Student not found”**.

# Evaluation of Lab Exam should be based on the following criteria:

|  |  |  |  |
| --- | --- | --- | --- |
| **Criteria** | **Details** | **Max Marks** | **Marks Obtain** |
| Algorithm | Documentation of Algorithm and Flowchart | 30 |  |
| Program adheres to the algorithm and flowchart |
| Efficiency | Program is using only the required number of variables  /conditions/loops/pointers etc and is optimal |
| Correctness | The program produces desired output for a given input |
| The program handles all valid and Invalid inputs |
| Software Engineering Principles | The program has meaning variable/function names |
| The program is commented properly (At least 20% of the code should be commented) |
| Viva |  | 10 |  |
|  | ***Total Marks*** | **40** |  |

## \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

## Signature of Student Signature of Evaluator Signature of Coordinator

# Course Name: PG-DAC Batch: Aug 2024

# Module Name: Database Technologies [Set 4] Date: \_\_\_\_\_\_\_\_\_\_\_\_\_

# Student Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Max Marks: 40 Marks

# PRN: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Duration: 2 Hours

**Section A: Question no 1 to 10: 2 Marks**  
  
1)    Get student nameFirst with how many characters are there in their nameFirst.  
  
2)    Get (nameFirst, nameLast and last 3 letters of nameFirst) for all students.  
  
3)    Display all students with their voting rights, if the student is below 1980 then print the message **“\*The student can vote”** else print **“The student cannot vote”**.  
  
4)   Display students nameFirst, nameLast, and DoB who have not having any type of cards.   
  
5)    Write a query to create identical table (with your name) of student table includes all the key (e.g. Primary key,..) .  
  
6)    Display all courses whose course duration is 6 months.(use course table)  
  
7)    Display student\_phone number in the following format “\*\*\*\*\*\*8765” for all students.  
  
8)    List first 10 modules after arranging the module name in descending order.  
  
9)    Count how many students have done ‘BE’ in the year 2017.  
  
10)   Display the department number where only male employees are working (use EMP table)  
  
**Section B: 10 Marks**

Write **studentDelete** Stored Procedure to delete student record from student table. If the entered studentID is present in the STUDENT Table display the student details and then delete the record and print message **“Student deleted!”**, if the student is not present print message **“Student not found”**.

# Evaluation of Lab Exam should be based on the following criteria:

|  |  |  |  |
| --- | --- | --- | --- |
| **Criteria** | **Details** | **Max Marks** | **Marks Obtain** |
| Algorithm | Documentation of Algorithm and Flowchart | 30 |  |
| Program adheres to the algorithm and flowchart |
| Efficiency | Program is using only the required number of variables  /conditions/loops/pointers etc and is optimal |
| Correctness | The program produces desired output for a given input |
| The program handles all valid and Invalid inputs |
| Software Engineering Principles | The program has meaning variable/function names |
| The program is commented properly (At least 20% of the code should be commented) |
| Viva |  | 10 |  |
|  | ***Total Marks*** | **40** |  |

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## Signature of Student Signature of Evaluator Signature of Coordinator

# Course Name: PG-DAC Batch: Aug 2024

# Module Name: Database Technologies [Set 5] Date: \_\_\_\_\_\_\_\_\_\_\_\_\_

# Student Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Max Marks: 40 Marks

# PRN: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Duration: 2 Hours

**Section A: Question no 1 to 10: 2 Marks**  
1)    Get student nameFirst with how many characters are there in their nameFirst.  
  
2)    Get (nameFirst, nameLast and last 3 letters of nameFirst) for all students.  
  
3)    Display the difference between the salary of ‘SMITH’ and ‘JONES’ (use EMP table).   
  
4)    Write a query to display the student data following format

**(Bhoopali Nanadikar and emailID is bhoopali.nanadikar@gmail.com)**  
      
5)    Display nameFirst and count how many ‘A’ char in appearing in their names.  
  
6)    Write a query to count total student who have done 'BE' and year of passing is 2014.  
  
7)    Display department number of where only female employees are working (use EMP table)   
  
8)    Display salary and 'Low Salary', 'Medium Salary’, and 'High Salary' in the following cases if salary < 1999 then display 'Low Salary', if salary>2000 and salary<3000 then display 'Medium Salary' if salary>3000 then display 'High Salary'.  
  
9)  Find the maximum marks any student have got in ‘BE’.  
  
10) Write a query to create a new identical table (named student1) as like student table with all students’ records.  
  
**Section B: 10 marks**

Write **studentDisplay** Stored Procedure to display all the student from student table. If the student table in not existing then create a new table by the name ABC(\_id int, nameFirst varchar(20), salary int))

# Evaluation of Lab Exam should be based on the following criteria:

|  |  |  |  |
| --- | --- | --- | --- |
| **Criteria** | **Details** | **Max Marks** | **Marks Obtain** |
| Algorithm | Documentation of Algorithm and Flowchart | 30 |  |
| Program adheres to the algorithm and flowchart |
| Efficiency | Program is using only the required number of variables  /conditions/loops/pointers etc and is optimal |
| Correctness | The program produces desired output for a given input |
| The program handles all valid and Invalid inputs |
| Software Engineering Principles | The program has meaning variable/function names |
| The program is commented properly (At least 20% of the code should be commented) |
| Viva |  | 10 |  |
|  | ***Total Marks*** | **40** |  |

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## Signature of Student Signature of Evaluator Signature of Coordinator

# Course Name: PG-DAC Batch: Aug 2024

# Module Name: Database Technologies [Set 6] Date: \_\_\_\_\_\_\_\_\_\_\_\_\_

# Student Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Max Marks: 40 Marks

# 

# PRN: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Duration: 2 Hours

**Section A: Question no 1 to 10: 2 Marks**

1)    Display the count of modules taught in ‘PD-DAC’ course.

2)    Display student nameFirst and how many characters are there in their emailID.

3)    Display (nameFirst and DoB) for all students, and print then rows in following format.

**e.g. ‘’deep was born in the month of August“.**

4)    Display all students with their voting rights, if the student is below 1980 then print the message **“\*The student can vote”** else print **“The student cannot vote”.**

5)    Display the student name and phone details where student ID is 7.

6)    Display nameFirst and count how many ‘A’ char in appearing in their names.

7)    Display all students whose DoB in the month between ‘July’ to ‘September’.

8)    Display student\_phone number in the following format “703\*\*\*\*027” for all students.

9)    List first 10 modules after arranging the module name in descending order.

10)   Display the second lowest marks scored by any student in ‘BE’.

**Section B: 10 Marks**

Write Stored Function named FN1() to accept student name. If the student is not present in the student table, print **“Student Not Found”** message using global variable. If the student is present then print his name in the following format.

**INPUT : FN1(‘SALEEL’)**

**OUTPUT : S-A-L-E-E-L**

# Evaluation of Lab Exam should be based on the following criteria:

|  |  |  |  |
| --- | --- | --- | --- |
| **Criteria** | **Details** | **Max Marks** | **Marks Obtain** |
| Algorithm | Documentation of Algorithm and Flowchart | 30 |  |
| Program adheres to the algorithm and flowchart |
| Efficiency | Program is using only the required number of variables  /conditions/loops/pointers etc and is optimal |
| Correctness | The program produces desired output for a given input |
| The program handles all valid and Invalid inputs |
| Software Engineering Principles | The program has meaning variable/function names |
| The program is commented properly (At least 20% of the code should be commented) |
| Viva |  | 10 |  |
|  | ***Total Marks*** | **40** |  |

## Signature of Student Signature of Evaluator Signature of Coordinator