Question - 1
Handling SUM

Employee table named INTX_EMP as the below table structure

EMPNO	NUMBER
ENAME	VARCHAR2(25)
JOB	VARCHAR2(10)
SALARY	NUMBER NOT NULL
VARIABLES	NUMBER NOT NULL
BONUS	NUMBER

It contains the below values

EMPNO	ENAME	JOB	SALARY	VARIABLES	BONUS
7369	SMITH	ANALYST	100	0	100
7499	ALLEN	SALESMAN	150	150	NULL
7521	WARD	ANALYST	100	0	100
7566	JONES	MANAGER	200	200	200
7654	MARTIN	SALESMAN	150	150	NULL

Pls write a select query to display the below results

SUM of Salary	Total Pay Out
700	1600

Question - 2
Employees Table and Department table

You are given two tables to work on Employees Table and Department table whose schemas are as below

Table Name : INTX_DEPT

DEPTNO [INT]	DNAME [varchar(20)]	LOCATION [char(25)]

ID	NAME	SALARY	MANAGERNO	DEPTNO	HIREDATE	NATIVITY
[Char(4)]	[Varchar(15)]	[DECIMAL(18,2)]	[Char(4)]	[INT]	Date	[Varchar(15)]

Write a SQL statement to list all department names along with department id , location and also with the manager id and manager name of each department.

Question - 3
Employees Table and Department table – MEDIUM 5

ID	NAME	SALARY	MANAGERNO	DEPTNO	HIREDATE	NATIVITY
[Char(4)]	[Varchar(15)]	[DECIMAL(18,2)]	[Char(4)]	[INT]	Date	[Varchar(15)]

DISPLAY the first employee (ID AND NAME) who joined in each department

Question - 4
Employees Table and Department table - MEDIUM 1

You are given two tables to work on Employees Table and Department table whose schemas are as below

Table Name : INTX_DEPT

DEPTNO [INT]	DNAME [varchar(20)]	LOCATION [char(25)]

Table: INTX_EMPLOYEES

ID	NAME	SALARY	MANAGERNO	DEPTNO	HIREDATE	NATIVITY
[Char(4)]	[Varchar(15)]	[DECIMAL(18,2)]	[Char(4)]	[INT]	Date	[Varchar(15)]

Write a query to List all Employees who are Managers in the lexicographic order of their names

Question - 5
Employees Table and Department table -2

You are given two tables to work on Employees Table and Department table whose schemas are as below

Table Name : INTX_DEPT

DEPTNO [INT]	DNAME [varchar(20)]	LOCATION [char(25)]

Table: INTX_EMPLOYEES

ID	NAME	SALARY	MANAGERNO	DEPTNO	HIREDATE	NATIVITY
[Char(4)]	[Varchar(15)]	[DECIMAL(18,2)]	[Char(4)]	[INT]	Date	[Varchar(15)]

Write a Query to list all Employees (names) who joined before Aug 2000

Question - 6
FIFA World Cup RunnerUp

FIFA World Cup Final Matches Information is given below in a table.

FIFA_WORLDCUP

Name	Nullable	Type	Key
YEAR	No	INT	PK
HOST		VARCHAR(50)	
WINNER_CTRY		VARCHAR(20)	
FINAL_SCORE		VARCHAR(10)	
FINAL_EXTRA_TIME		CHAR(1)	
FINAL_PENALTY		VARCHAR(10)	
RUNNER_UP_CTRY		VARCHAR(20)	
THIRD_PLACE_CTRY		VARCHAR(20)	
THIRD_PLACE_SCORE		VARCHAR(20)	

THIRD_PLACE_EXTRATIME		CHAR(1)	
FOURTH_PLACE_CTRY		VARCHAR(20)	
NUMBER_OF_TEAMS		INT	

Which of participating teams reached till finals most number of times but could not win even once.

Question - 7
Maximum Cumulative Hackos

You are given the table *Hacker_details*, which has the schema described below.

Hacker_details
H_id is the id of the coder (hacker), *Name* is the name of the hacker, *Time* is the time in months since they started coding and *Hackos* represent the points that the coder gains per month.

Column	Type
H_id	Integer
Name	String
Time	Integer
Hackos	Integer

Write a query to print the maximum number of total hackos that any hacker has earned since they started programming, also print the count of the number of hackers who have that same maximum number of hackos.

Question - 8
Three Sticks

You are given a table *Sticks,* which has the schema described below:

Sticks
Stick 1, *Stick 2,* and *Stick 3* represent the length of the 3 available sticks.

Column	Type
Stick1	Integer
Stick2	Integer
Stick3	Integer

Each row of the table represents one of the following situations:

None - If the sum of the length of two sticks is not greater than the length of the third one.
Equilateral - If all three sticks have equal length.
Isosceles - If two out of the three sticks have equal length.
Scalene - If all three sticks have different lengths.

Write a query to print which scenario is represented by each row of the table.

Question - 9
Employee Salaries

Write a query to print the *name* and *salary* for all employees in the *Employee* table who earn a salary larger than *$500*. Sort your results in ascending order of the *last 3 characters* in the employee's *name*; if two or more employees have names ending with same *3* characters, then sort them by highest (descending) *salary*.

Input Format
The *Employee* table is described as follows:

Field	Type
ID	Integer
NAME	String
SALARY	Integer

where *ID* is the employee's ID number, *NAME* is the employee's name, and *SALARY* is the employee's salary in dollars.
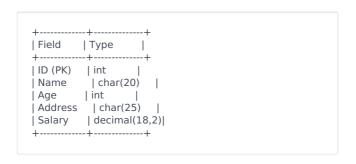
Question - 10
Employees 4

You are given a table called EMPLOYEES.
Print all the names of pairs of employees where the first employee's salary is lower than other.

Output Format:
Each line contains two names name1 and name2 separated by a space. (salary of name1 < salary of name2)

Table: **EMPLOYEES**

```
+-------------+--------------+
| Field       | Type         |
+-------------+--------------+
| ID (PK)     | int          |
| Name        | char(20)     |
| Age         | int          |
| Address     | char(25)     |
| Salary      | decimal(18,2)|
+-------------+--------------+
```

Question - 11
Programming Languages 4

You are given the table LANGUAGE (ID, NAME, USERS) where the columns represent id numbers, name of the programming language and number of users respectively.

List the names of languages having more than average number of users.

Table: **LANGUAGE**

```
+-------------+----------+
| Field       | Type     |
+-------------+----------+
| ID (PK)     | int      |
| Name        | char(20) |
| Users       | int      |
+-------------+----------+
```

Question - 12
Generate a report

Table named INTX_ACCT_TRANS as the below structure

acctnum	INT
transdate	DATE
debitcreditflag	VARCHAR (1)
amount	NUMBER

The table contains the below data

acctnum	transdate	debitcreditflag	amount
1234	23-May-16	C	500
1234	23-May-16	D	100
1234	23-May-16	C	50
7455	24-May-16	C	7000
7455	24-May-16	D	100
1234	24-May-16	D	100

Generate a report in the following format(pls refer the output tab)

acctunum	transdate	No.of Debits	No.of Credits
1234	2016-05-23	1	2
1234	2016-05-24	1	0

| 7455 | 2016-05-24 | 1 | 1 |

Question - 13
Students and Departments

A university uses *2* data tables, *Students* and *Departments*, to store data about its students and the departments associated with each major. Write a query to print the respective *department name* and *number of students* majoring in each department for *all* departments in the *Departments* table (even ones with no current students). Sort your results by descending *number of students*; if two or more departments have same number of students, then sort those departments alphabetically by *department name*.

Input Format
The *Students* and *Departments* tables are described as follows:

Students

Column Name	Type
STUDENT_ID	Integer
STUDENT_NAME	String
GENDER	Character
DEPT_ID	Integer

where *STUDENT_ID* is the student's ID number, *STUDENT_NAME* is the student's name, *GENDER* is their gender, and *DEPT_ID* is the department ID associated with their declared major.

Departments

Column Name	Type
DEPT_ID	Integer
DEPT_NAME	String

where *DEPT_ID* is the department's ID number and *DEPT_NAME* is the department name.

Question - 14
Orders 3

You are given the table *orders,* which has the schema described below.

Find the 5 oldest (earliest) orders which are not yet shipped.

Table: **ORDERS**

```
+-----------------+--------------+
| Field           | Type         |
```

```
+-----------------+--------------+
| orderNumber (PK)| int         |
| orderDate      | date        |
| requiredDate   | date        |
| shippedDate    | date        |
| status         | char(15)    |
| comments       | char(200)   |
| customerNumber | int         |
+-----------------+--------------+
```

Note: If shipped status = 'Shipped'

Question - 15
Programming Languages 5

You are given the table LANGUAGE (ID, NAME, USERS) where the columns represent id numbers, name of the programming language and number of users respectively.

List the top 3 languages with the highest number of users (in increasing order of number of users).

Table: **LANGUAGE**

```
+-------------+----------+
| Field      | Type    |
+-------------+----------+
| ID (PK)    | int     |
| Name       | char(20)|
| Users      | int     |
+-------------+----------+
```