DBMS Experiment 4

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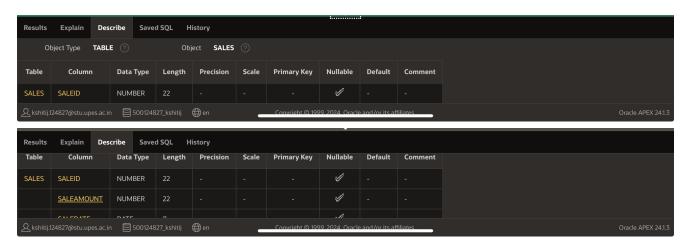
Batch: 49

Date: 4 September 2024

Question 1

Creating the Table

```
CREATE TABLE SALES (
SaleID number,
SaleAmount number,
SaleDate date
)
```

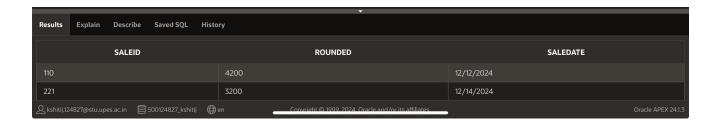


```
INSERT ALL
     into Sales values (110, 4234,'12/12/2024')
     into Sales values (221, 3211,'12/14/2024')
     into Sales values (353, 1232,'12/15/2024')
     into Sales values (353, 2222,'12/13/2024')
     into Sales values (3523, 5152,'12/11/2024')
select * from dual
```



Rounding Values to the Nearest 100

Select SaleID, Round(SaleAmount, -2) as Rounded, SaleDate from Sales



Modulus of Each Sale divided By 100

select SaleID, Mod(SaleAmount, 100), SaleDate from Sales



Question 2

Creating Tables

```
CREATE TABLE Employees (
    EmployeeID NUMBER PRIMARY KEY,
    Name VARCHAR2(100),
    HireDate DATE
);
```



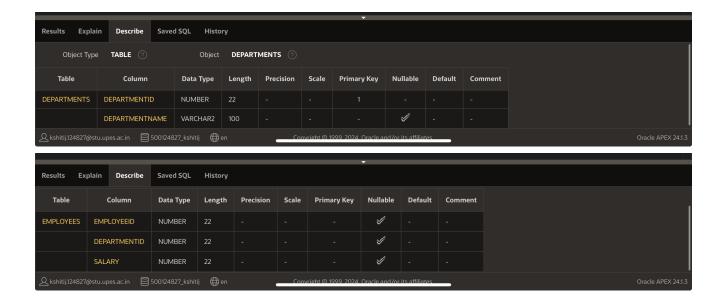
Showing the Values

```
SELECT EmployeeID, Name, HireDate, TRUNC(SYSDATE - HireDate) AS
DaysSinceHire
FROM Employees;
```

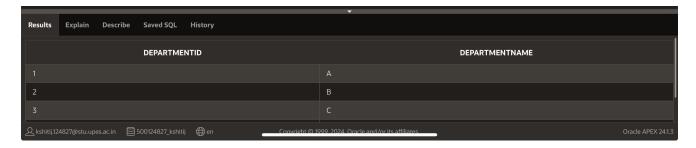
Question 3

Creating the Tables

```
CREATE TABLE Departments (
DepartmentID number primary key,
DepartmentName varchar2(100),
)
CREATE TABLE Employees (
EmployeeID number,
DepartmentID number,
Salary number,
foreign key (DepartmentID) references Departments(DepartmentID)
)
```



```
insert all
  into Departments Values (1, 'A')
  into Departments Values (2, 'B')
  into Departments Values (3, 'C')
  into Departments Values (4, 'D')
select * from dual
```



```
insert all
  into employees Values (1, 1, 10000)
  into employees Values (2, 4, 10000)
  into employees Values (3, 1, 20000)
  into employees Values (4, 2, 30000)
  into employees Values (5, 3, 50000)
select * from dual
```



Total, Minimum, Maximum and Average Salary

```
select SUM(Salary) as Total, AVG(Salary) as Average, Min(Salary) as Lowest,
Max(Salary) as Highest from Employees
```



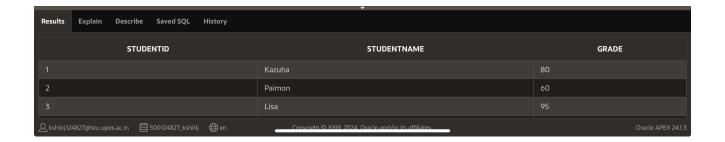
Question 4

Creating the Table

```
CREATE TABLE Grades (
StudentID NUMBER,
StudentName VARCHAR2(100),
Grade NUMBER
);
```

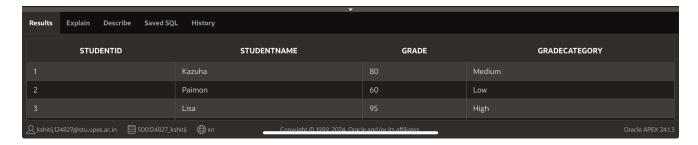


```
INSERT ALL
        INTO Grades VALUES (1, 'Cyno', 80);
        INTO Grades VALUES (2, 'Jean', 60);
        INTO Grades VALUES (3, 'Klee', 95);
        INTO Grades VALUES (4, 'Nilou', 75);
        INTO Grades VALUES (5, 'Benett', 85);
select * from dual
```



Selecting the Relevant Values

```
SELECT
    StudentID,
    StudentName,
    Grade,
    CASE
        WHEN Grade < 70 THEN 'Low'
        WHEN Grade >= 70 AND Grade < 90 THEN 'Medium'
        ELSE 'High'
    END AS GradeCategory
FROM Grades;</pre>
```

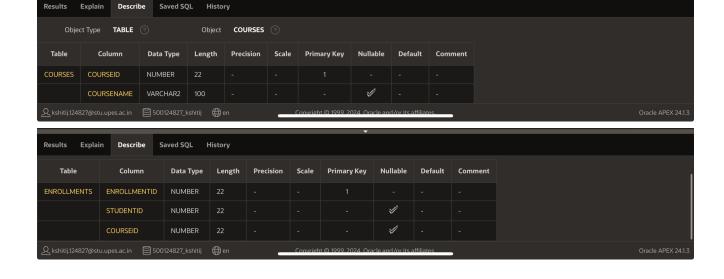


Question 5

Creating Tables

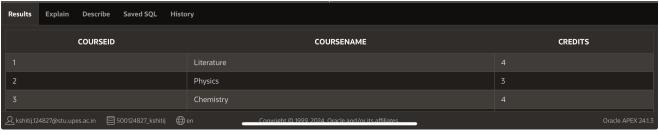
```
create table Courses (
   CourseID number primary key,
   CourseName varchar(100),
   Credits number
)

create table Enrollments (
   EnrollmentID number primary key,
   StudentID number,
   CourseID number,
   foreign key (CourseID) references Courses(CourseID)
)
```



```
insert all
    into Courses values (1, 'Literature', 4)
    into Courses values (2, 'Physics', 3)
    into Courses values (3, 'Chemistry', 4)
    into Courses values (4, 'Computer Science', 2)
    into Courses values (5, 'Discrete Mathematics', 5)
select * from dual

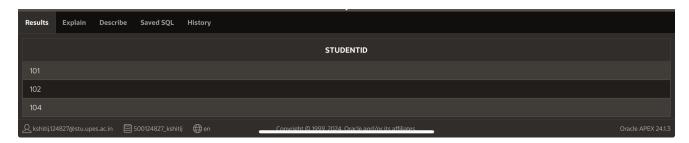
--INSERTING THE RECORDS IN ENROLMENTS
insert all
    into Enrollments values (1, 101, 1)
    into Enrollments values (2, 102, 3)
    into Enrollments values (3, 103, 2)
    into Enrollments values (4, 104, 5)
    into Enrollments values (5, 105, 4)
select * from dual
```



| Results | Explain Describe Saved SQL History | | |
|------------|---|--|--------------------|
| | ENROLLMENTID | STUDENTID | COURSEID |
| 1 | | 101 | 1 |
| 2 | | 102 | 3 |
| 3 | | 103 | 2 |
| kshitij.12 | 4827@stu.upes.ac.in 🛢 500124827_kshitij 🖶 en Co | opyright © 1999-2024. Oracle and /or its affiliates. | Oracle APEX 24.1.3 |

Credits More Than 3

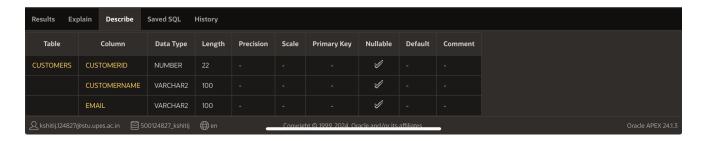
```
select StudentID from Enrollments
where CourseID in (
    select CourseID
    from Courses
    where Credits > 3
)
```



Question 6

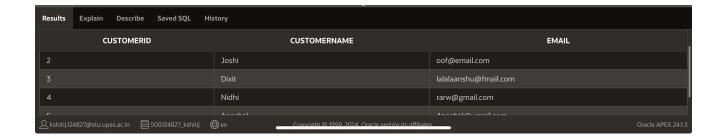
Creating the Table

```
create table Customers (
    CustomerID number,
    CustomerName Varchar2(100),
    Email Varchar2(100)
)
```

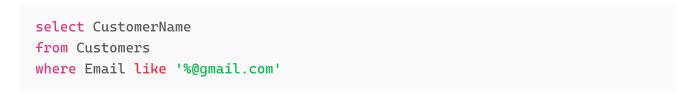


Inserting The Values

```
insert all
into Customers values (001, 'Naman', 'raghvendra@gmail.com')
into Customers values (002, 'Joshi', 'oof@email.com')
into Customers values (003, 'Dixit', 'lalalaanshu@fmail.com')
into Customers values (004, 'Nidhi', 'rarw@gmail.com')
into Customers values (005, 'Aanchal', 'Aanchal@wmail.com')
select * from dual
```



Showing the Values where Email is a Gmail.com Domain

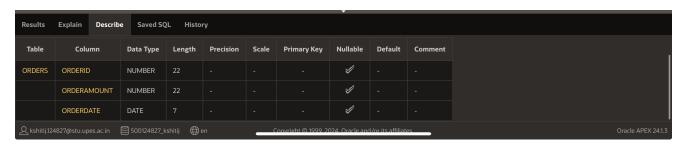




Question 7

Creating the Tables

```
create table orders
(
    orderid number,
    orderAmount number,
    orderdate date
);
```



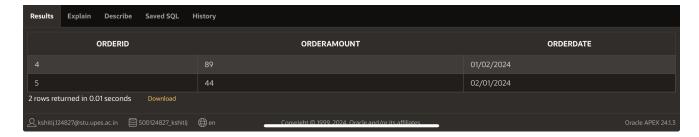
```
insert all
  into orders values(1,8,to_date('01/8/2024'))
```

```
into orders values(2,6,to_date('02/8/2023'))
into orders values(3,9,to_date('12/1/2023'))
into orders values(4,89,to_date('1/2/2024'))
into orders values(5,44,to_date('2/1/2024'))
select * from dual
```



Selecting the Orders which are above average

```
SELECT orderID, orderAmount, orderDate
FROM orders
WHERE orderAmount > (SELECT AVG(orderAmount) FROM orders);
```



Question 8

Creating The Tables

```
create table membership
(
    memeberid number,
    memebername varchar2(100),
    joinDate date
);
''`
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### Inserting the Values
''`SQL
insert all
    into membership values(1,'Ragav',to_date('01/8/2024'))
    into membership values(2,'Pranjal',to_date('02/8/2023'))
    into membership values(3,'Deepu',to_date('12/1/2023'))
    into membership values(4,'Rishi',to_date('1/2/2024'))
    into membership values(5,'jon',to_date('2/1/2024'))
```

```
select * from dual
select * from membership
```



Showing the Values

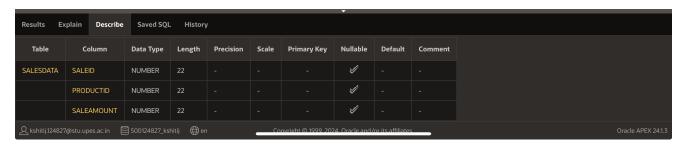
```
select memeberid, memebername, joinDate
from membership
where joinDate >= ADD_MONTHS(SYSDATE, -12);
```



Question 9

Creating the Table

```
create table SalesData (
    SaleID Number,
    ProductID Number,
    SaleAmount Number
)
```



Inserting The Records

```
insert all
into SalesData values (1, 011, 500)
into SalesData values (2, 022, 600)
into SalesData values (3, 033, 700)
into SalesData values (4, 044, 800)
into SalesData values (5, 055, 1000)
select * from dual
```

| Results | Explain Describe | Saved SQL | History | · | | |
|---------|------------------|-----------|---------|---------|---------|--------------------|
| | SALEID | | PRO | ODUCTID | SALEAMO | UNT |
| 1 | | | | | 500 | |
| 2 | | | 22 | | 600 | |
| 3 | | | | | 700 | |
| | | | | | | Oracle APEX 24.1.3 |

Showing

```
select ProductID
from SalesData
group by ProductID
having sum(SaleAmount) > (select avg(TotalSales)
    from (
        select ProductID, sum(SaleAmount) as TotalSales
        from SalesData
        group by ProductID
    )
)
```

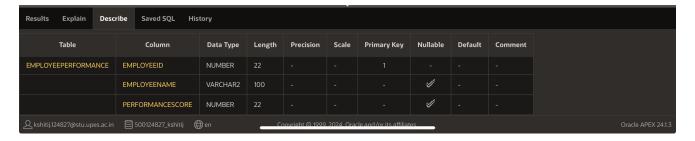


Question 10

Creating The Table

```
create table employeperformance (
   employeeid number primary key,
   employeename varchar2(100),
```

```
performancescore number
);
```





Selecting the Relevant Values

```
select employeeid, employeename, performancescore
from employeperformance
where performancescore > (
          select avg(performancescore)
          from employeperformance
);
```

