

Which of the following is aggregate function in SQL?

- A Avg
- B Select
- C Ordered by
- D distinct

Answer: A

Consider the following three SQL queries (Assume the data in the people table): (a)Select Name from people where Age > 21; (b)Select Name from people where Height > 180; (c)Select Name from people where (Age > 21) or (Height > 180); If the SQL queries (a) and (b) above, return 10 rows and 7 rows in the result set respectively, then what is one possible number of rows returned by the SQL query (c) ?

- A 3
- B 7
- C 10
- D 21

Answer: C

Consider the following relational schema:

```
EmployeeDetail (EmpId, FullName, ManagerID, DateOfJoining)
EmployeeSalary (EmpID, Project, Salary)
```

Consider the following relational query on the above database:

```
SELECT Salary
FROM EmployeeSalary Emp1
WHERE 2 = (
    SELECT COUNT( DISTINCT ( Emp2.Salary ) )
    FROM EmployeeSalary Emp2
    WHERE Emp2.Salary > Emp1.Salary
)
```

Assume that relations corresponding to the above schema are not empty. Which one of the following is the correct interpretation of the above query?

- A find the highest salary from table
- B find the 2nd highest salary from table
- C find the 3rd highest salary from table
- D None of above

Answer: C

Consider the following Employee table

ID	salary	DeptName
1	10000	EC
2	40000	EC
3	30000	CS
4	40000	ME
5	50000	ME
6	60000	ME
7	70000	CS

How many rows are there in the result of following query?

```
SELECT E.ID
FROM Employee E
WHERE EXISTS (SELECT E2.salary
              FROM Employee E2
              WHERE E2.DeptName = 'CS'
              AND E.salary > E2.salary)
```

- A 0
- B 4
- C 5
- D 6

Answer: C

A relational schema for a train reservation database is given below. Passenger (pid, pname, age)
Reservation (pid, class, tid)

Table: Passenger

pid	pname	age
0	Sachin	65
1	Rahul	66
2	Sourav	67
3	Anil	69

Table : Reservation

pid	class	tid
0	AC	8200
1	AC	8201
2	SC	8201
5	AC	8203
1	SC	8204
3	AC	8202

What pids are returned by the following SQL query for the above instance of the tables?

```
SLECT pid
FROM Reservation ,
WHERE class 'AC' AND
      EXISTS (SELECT *
              FROM Passenger
              WHERE age > 65 AND
                    Passenger.pid = Reservation.pid)
```

- A** 1,0
- B** 1,2
- C** 1,3
- D** 1,5

Answer: C

Consider the table employee(empId, name, department, salary) and the two queries Q1 ,Q2 below. Assuming that department 5 has more than one employee, and we want to find the employees who get higher salary than anyone in the department 5, which one of the statements is TRUE for any arbitrary employee table?

```
Q1 : Select e.empId
      From employee e
      Where not exists
          (Select * From employee s where s.department = "5" and
           s.salary >=e.salary)

Q2 : Select e.empId
      From employee e
      Where e.salary > Any
          (Select distinct salary From employee s Where s.department = "5")
```

- A Q1 is the correct query
- B Q2 is the correct query
- C Both Q1 and Q2 produce the same answer.
- D Neither Q1 nor Q2 is the correct query

Answer: A

Consider the following query

```
CREATE TABLE Employee (
  Employeeid int IDENTITY(43143143,10000) PRIMARY KEY,
  LastName varchar(255) NOT NULL,
  FirstName varchar(255),
  Age int
);
```

Mr.Varun being a DBA(Database Administrator) tries to insert tuples into Employee table.

What would be the Employeeid of 10001th Row?

Answer : 143143143

Consider two tables

Table: Passenger		
pid	pname	age
0	Sachin	65
1	Rahul	66
2	Sourav	67
3	Anil	69

Table : Reservation		
pid	class	tid
0	AC	8200
1	AC	8201
2	SC	8201
5	AC	8203
1	SC	8204
3	AC	8202

Try to find the output of the below queries without using software

✚ `Select count(pid) from reservation`

Answer: 6

✚ `Select count (*) from passenger where pid in (0,0,0,1,2,2,2,2)`

Answer: 3

✚ `Select count (*) from passenger where pid in (select pid from reservation)`

Answer: 4

✚ `Select count (*) from passenger where 1=1`

Answer: 4

✚ `Select count (*) from passenger where Null= Null`

Answer: 0

✚ `Select count (*) from passenger where pid in (0,1,2, Null)`

Answer: 3

✚ `Select sum (10) from passenger`

Answer: 40

✚ `Select count (10) from passenger`

Answer: 10

✚ Select top 25 percent * from passenger. Number of Tuples=?

Answer: 1

✚ Select * from passenger where age between 60 and 67. Number of Tuples=?

Answer: 3