**EXPERIMENT NO: 9**

mysql> select\* from info;

+---------+--------------------+----------+------+--------+------+-------+------+

| ROLL\_NO | NAME | BRANCH | YEAR | CITY | AGE | MATHS | TCS |

+---------+--------------------+----------+------+--------+------+-------+------+

| 10 | SHIVANI GHUGE | COMPUTER | S.E | MUMBAI | 19 | 80 | 76 |

| 20 | NEHA RAI | COMPUTER | S.E | MUMBAI | 19 | 79 | 78 |

| 30 | MRINALINI BHANDARI | I.T | S.E | MUMBAI | 19 | 78 | 76 |

| 40 | DIPTI PANDHRAM | EXTC | S.E | PUNE | 19 | 80 | 74 |

| 50 | AKASH KHARVI | COMPUTER | S.E | MUMBAI | 19 | 76 | 76 |

| 60 | SHAHID SHAIKH | COMPUTER | S.E | MUMBAI | 19 | 75 | 78 |

| 70 | PRATIK MORE | COMPUTER | S.E | MUMBAI | 19 | 74 | 76 |

| 80 | ROHIT CHAVAN | COMPUTER | S.E | MUMBAI | 19 | 78 | 78 |

| 90 | SONALI DESHPANDE | COMPUTER | S.E | MUMBAI | 19 | 74 | 80 |

+---------+--------------------+----------+------+--------+------+-------+------+

9 rows in set (0.00 sec)

**1) GROUP BY:**

mysql> SELECT BRANCH,MAX(MATHS) HIGHEST FROM info GROUP BY BRANCH ;

+----------+---------+

| BRANCH | HIGHEST |

+----------+---------+

| COMPUTER | 80 |

| EXTC | 77 |

| I.T | 78 |

+----------+---------+

3 rows in set (0.00 sec)

mysql> SELECT BRANCH,MIN(MATHS) MINIMUM FROM info GROUP BY BRANCH ;

+----------+---------+

| BRANCH | MINIMUM |

+----------+---------+

| COMPUTER | 74 |

| EXTC | 77 |

| I.T | 78 |

+----------+---------+

3 rows in set (0.00 sec)

mysql> SELECT YEAR,AVG(MATHS) MATHS\_AVG,AVG(TCS) TCS\_AVG FROM info GROUP BY YEAR ;

+------+-----------+---------+

| YEAR | MATHS\_AVG | TCS\_AVG |

+------+-----------+---------+

| S.E | 76.7778 | 76.8889 |

+------+-----------+---------+

1 row in set (0.00 sec)

**2) HAVING:**

mysql> SELECT NAME,TCS+MATHS TOTAL FROM info HAVING TOTAL>155;

+---------------+-------+

| NAME | TOTAL |

+---------------+-------+

| SHIVANI GHUGE | 156 |

| NEHA RAI | 157 |

| ROHIT CHAVAN | 156 |

+---------------+-------+

3 rows in set (0.00 sec)

mysql> SELECT NAME,MATHS FROM info HAVING MATHS IN(75,76,77,78);

+--------------------+-------+

| NAME | MATHS |

+--------------------+-------+

| MRINALINI BHANDARI | 78 |

| DIPTI PANDHRAM | 77 |

| AKASH KHARVI | 76 |

| SHAHID SHAIKH | 75 |

| ROHIT CHAVAN | 78 |

+--------------------+-------+

5 rows in set (0.00 sec)

**3) ORACLE FUNCTIONS:**

mysql> SELECT AVG(MATHS),MIN(TCS),MAX(TCS),COUNT(MATHS) FROM info;

+------------+----------+----------+--------------+

| AVG(MATHS) | MIN(TCS) | MAX(TCS) | COUNT(MATHS) |

+------------+----------+----------+--------------+

| 76.7778 | 74 | 80 | 9 |

+------------+----------+----------+--------------+

1 row in set (0.00 sec)

mysql> SELECT YEAR,AVG(MATHS) FROM info WHERE AGE=19;

+------+------------+

| YEAR | AVG(MATHS) |

+------+------------+

| S.E | 76.7778 |

+------+------------+

1 row in set (0.00 sec)