Relational Algebra Practice   **Date:02/08/2024**

Q). Consider the following schema:

Suppliers (sid : integer, sname : string, address : string)

Pens (pid : integer, pname : string, color : string)

Catalog (sid : integer, pid : integer, cost : real)

The key fields are underlined and domain of each field is listed after the field name

1) **Find the name of supplier who supply red-color pens**
2) **Find the sids of suppliers who supply red-color or green-color pens**
3) **Find the sids of suppliers who supply red-color pens or address at 221 packer Ave**
4) **Find the sids of suppliers who supply red-color pens and blue-color pens**
5) **Find the sids of suppliers who supply every pens**

Q) Consider the following relational database schema consisting of four relational schema

passenger (pid, pname, pgender, pcity)
agency (aid, aname, acity)
bus (bid, bdate, btime, time, src, dest)
booking(pid, aid, bid, bdate)

1) **Give the details of all buses from Dhangadhi to Kathmmandu**
2) **Find the name of the passenger who booked at least one bus**
3) **Find the bus id (bid) for the passenger with pid p04 who booked bus to Butwai before 20/05/2023**
4) **Find the name of passenger who does not book any bus**
5) **Find the details of all passengers associated with Ugatara agency**