

TEAM 1 – PHASE 4
SHIVAM SAREEN 1001751987
PANKAJ WALKE 1001781008
CSE 5330 – SUMMER 2020

DATA SUMMARY:

DETAILS OF TABLE CREATED WITH NO. OF ENTRIES FOR EACH TABLE.

TABLE NAME	NO. OF ENTRIES
BOGIE	170
PASSENGERS	20
PASSENGER_BOOKING	240
ROUTE	14
STATION	6
TRAINS	26
TRAIN_OPERATIONAL_DAYS	132
TRAIN ARRIVES	61
TRAIN_DEPARTS	61

QUERY 1.

LIST OF STATIONS WITH NUMBER OF ROUTES OF DISTANCE MORE THAN 500 KMS.

THIS QUERY GIVES US THE COUNT OF ROUTES HAVING DISTANCE MORE THAN 500 KMS. FOR EACH STATION AND WHERE THERE IS MORE THAN ONE SUCH ROUTE EXISTS.

```
SELECT station_code, station_name, COUNT(route_no) AS no_of_routes
FROM s20_1_station s, s20_1_route r
WHERE (s.station_code = r.source_station_code OR s.station_code= r.dest_station_code)
AND distance >500
GROUP BY station_code,station_name
HAVING COUNT (r.route_no) > 1
ORDER BY COUNT (r.distance) desc;
```

QUERY 2.

DATA OF NO. OF PASSENGERS TRAVELLED IN EACH CLASS ON A PARTICULAR ROUTE. (WITH CUBE)

THIS QUERY GIVES US COUNT OF PASSENGERS TRAVELLED IN EACH CLASS FOR A PARTICULAR ROUTE. IT ALSO GIVES US OVERALL COUNT OF PASSENGERS TRAVELLED IN EACH CLASS WITH TOTAL NO. OF PASSENGERS IN OUR DATA. WITH THIS DATA WE CAN COME TO KNOW ABOUT THE MOST PREFERRED CLASS OF PASSENGERS.

```
SELECT t.route_no,class, COUNT(p.passenger_id)
FROM s20_1_passenger_booking p, s20_1_train t
WHERE p.train_no = t.train_no
GROUP BY CUBE (t.route_no, class)
ORDER BY t.route_no;
```

TEAM 1 – PHASE 4
SHIVAM SAREEN 1001751987
PANKAJ WALKE 1001781008
CSE 5330 – SUMMER 2020

QUERY 3.

DATA OF OVERALL PASSENGER TRAFFIC HANDLED BY A PARTICULAR STATION. (WITH ROLLUP)

THIS QUERY GIVES DETAILS OF TOTAL NO. OF PASSENGERS HANDLED BY EACH STATION WITH NO. OF PASSENGERS FOR EACH TRAIN AT THAT PARTICULAR STATION.

THIS DATA CAN BE USEFUL FOR MAKING DECISION ON EXPANSION OF A STATION.

```
SELECT s.station_name, t.train_no, COUNT (p.passenger_id) AS passenger_count
FROM s20_1_passenger_booking p, s20_1_train t, s20_1_route r, s20_1_station s
WHERE p.train_no = t.train_no and t.route_no = r.route_no AND
(r.source_station_code=s.station_code or r.dest_station_code=s.station_code)
GROUP BY ROLLUP (s.station_name,t.train_no)
ORDER BY s.station_name;
```

QUERY 4.

LIST OF OUT OF LIFE (MORE THAN 10 YRS. OF AGE) BOGIES FOR EACH CLASS.

```
SELECT b.class, COUNT (b.Bogie_No)
FROM s20_1_bogie b
WHERE (b.manufactured_year < 2010)
GROUP BY b.class
ORDER BY b.class;
```