Name: Sarthak Jain

Programme: B.tech CSE AI&ML

SUBJECT: Advanced Database Management Systems Lab

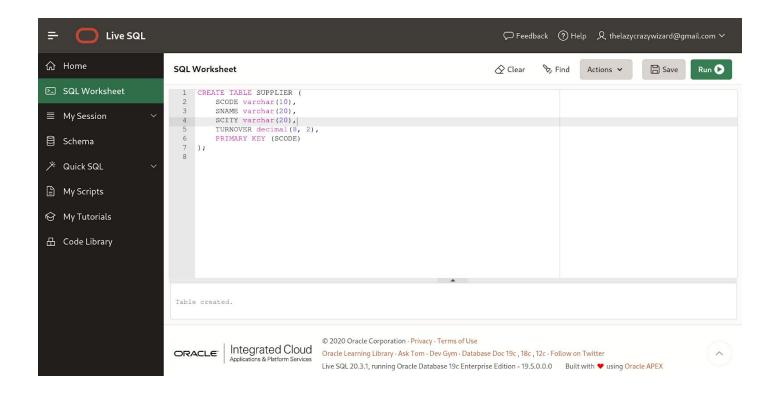
PRACTICAL 3

Title: To understand and use SQL Sub-Query Objective: To understand the use of sql subquery.

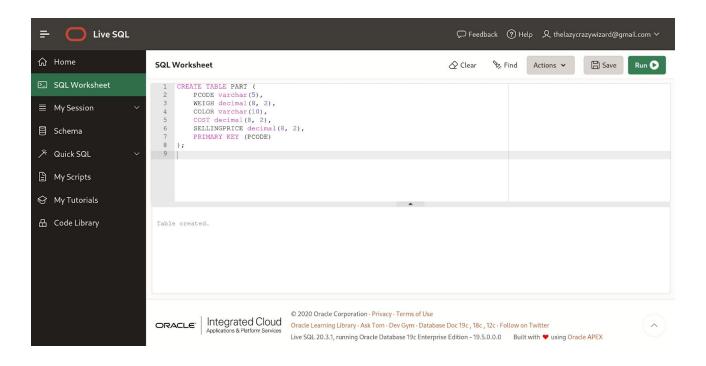
Create the following table.
 Supplier-(scode, sname, scity, turnover)
 Part-(pcode,weigh, color, cost, sellingprice)
 Supplier_Part-(scode, pcode, qty)

1.(solution)

```
CREATE TABLE SUPPLIER (
SCODE varchar(10),
SNAME varchar(20),
SCITY varchar(20),
TURNOVER decimal(8, 2),
PRIMARY KEY (SCODE)
);
```

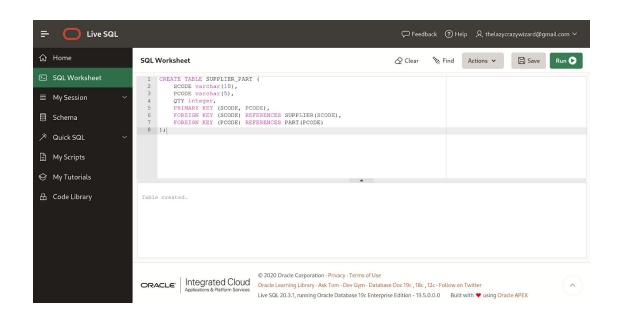


```
CREATE TABLE PART (
PCODE varchar(5),
WEIGH decimal(8, 2),
COLOR varchar(10),
COST decimal(8, 2),
SELLINGPRICE decimal(8, 2),
PRIMARY KEY (PCODE)
);
```



CREATE TABLE SUPPLIER_PART (SCODE varchar(10), PCODE varchar(5), QTY integer, PRIMARY KEY (SCODE, PCODE), FOREIGN KEY (SCODE) REFERENCES SUPPLIER(SCODE), FOREIGN KEY (PCODE) REFERENCES PART(PCODE)

);



2. Populate the table

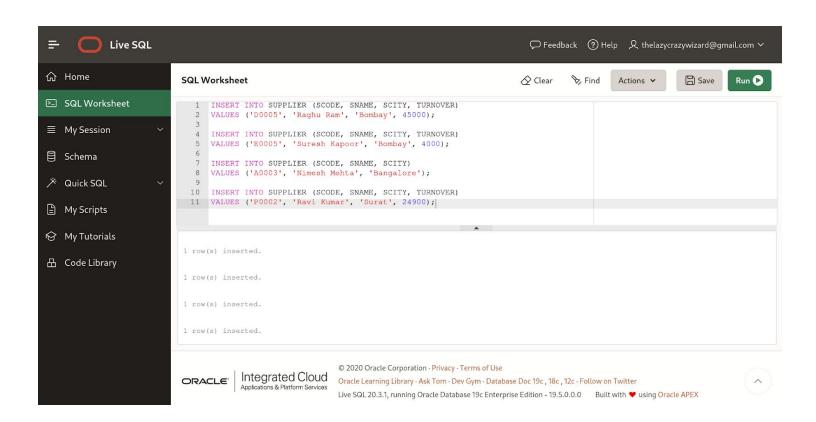
2.(solution)

INSERT INTO SUPPLIER (SCODE, SNAME, SCITY, TURNOVER) VALUES ('D0005', 'Raghu Ram', 'Bombay', 45000);

INSERT INTO SUPPLIER (SCODE, SNAME, SCITY, TURNOVER) VALUES ('E0005', 'Suresh Kapoor', 'Bombay', 4000);

INSERT INTO SUPPLIER (SCODE, SNAME, SCITY)
VALUES ('A0003', 'Nimesh Mehta', 'Bangalore');

INSERT INTO SUPPLIER (SCODE, SNAME, SCITY, TURNOVER) VALUES ('P0002', 'Ravi Kumar', 'Surat', 24900);



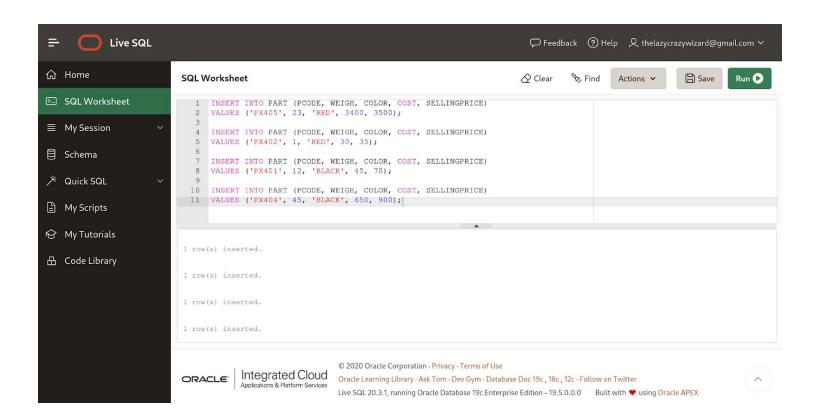
INSERT INTO PART (PCODE, WEIGH, COLOR, COST, SELLINGPRICE) VALUES ('PX405', 23, 'RED', 3400, 3500);

INSERT INTO PART (PCODE, WEIGH, COLOR, COST, SELLINGPRICE) VALUES ('PX402', 1, 'RED', 30, 35);

INSERT INTO PART (PCODE, WEIGH, COLOR, COST, SELLINGPRICE) VALUES ('PX401', 12, 'BLACK', 45, 70);

INSERT INTO PART (PCODE, WEIGH, COLOR, COST, SELLINGPRICE) VALUES ('PX404', 45, 'BLACK', 650, 900);

INSERT INTO PART (PCODE, WEIGH, COLOR, COST, SELLINGPRICE) VALUES ('PX406', 28, 'RED', 30, 35);

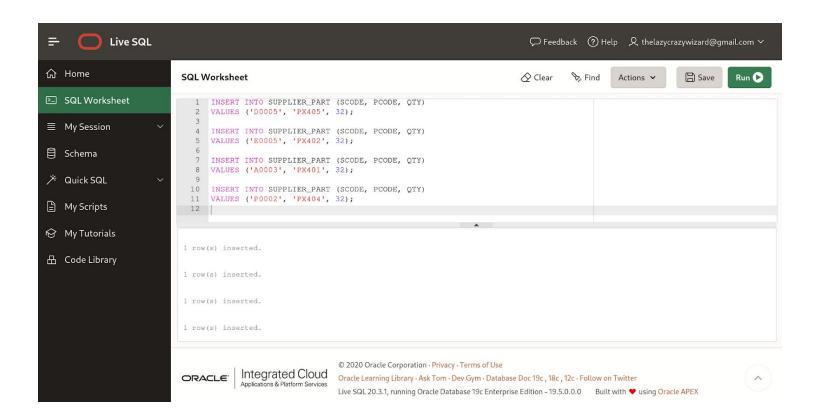


INSERT INTO SUPPLIER_PART (SCODE, PCODE, QTY) VALUES ('D0005', 'PX405', 32);

INSERT INTO SUPPLIER_PART (SCODE, PCODE, QTY) VALUES ('E0005', 'PX402', 32);

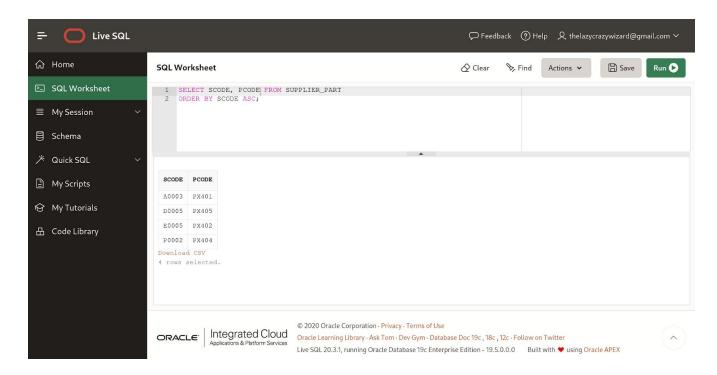
INSERT INTO SUPPLIER_PART (SCODE, PCODE, QTY) VALUES ('A0003', 'PX401', 32);

INSERT INTO SUPPLIER_PART (SCODE, PCODE, QTY) VALUES ('P0002', 'PX404', 32);



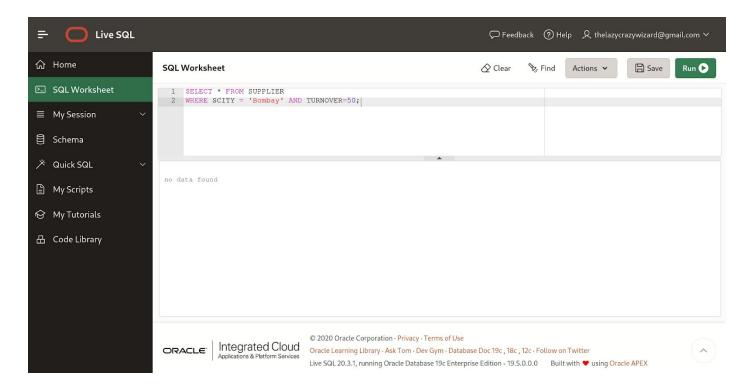
- 3. Write appropriate SQL Statement for the following:
- 3.1. Get the supplier number and part number in ascending order of supplier number. 3.1.(solution)

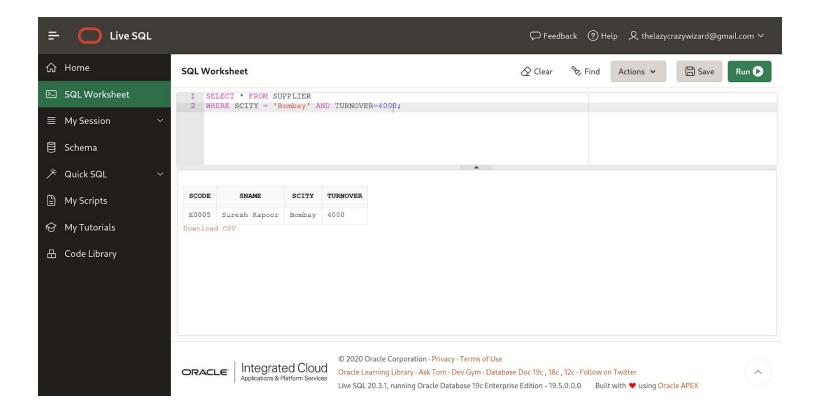
SELECT SCODE, PCODE FROM SUPPLIER_PART ORDER BY SCODE ASC;



3.2. Get the details of supplier who operate from Bombay with turnover 50. 3.2.(solution)

SELECT * FROM SUPPLIER WHERE SCITY = 'Bombay' AND TURNOVER=50;

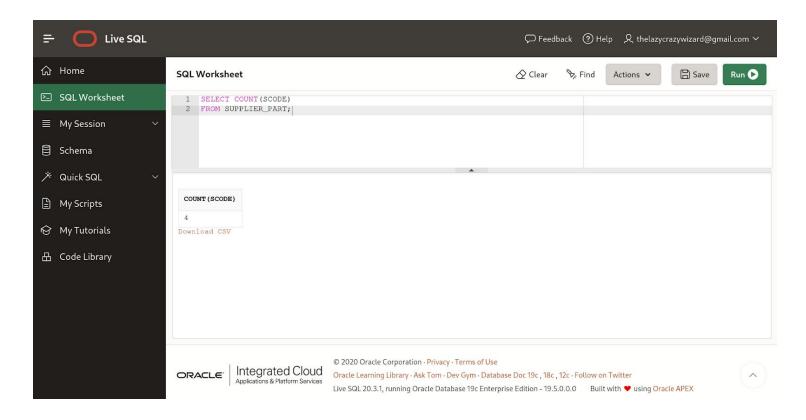




3.3. Get the total number of supplier.

3.3.(solution)

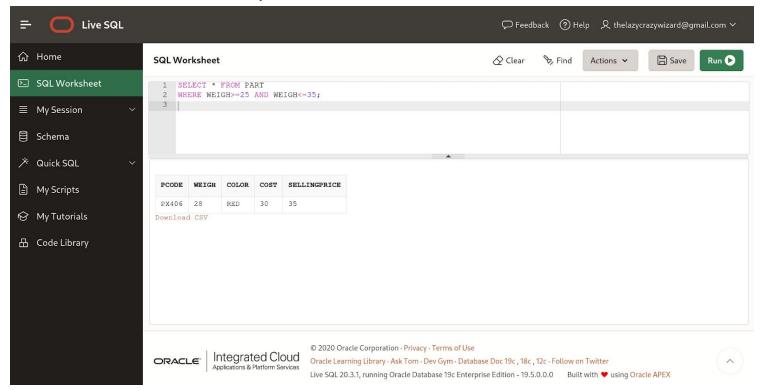
SELECT COUNT(SCODE) FROM SUPPLIER_PART;



3.4. Get the part number weighing between 25 and 35. 3.4.(solution)

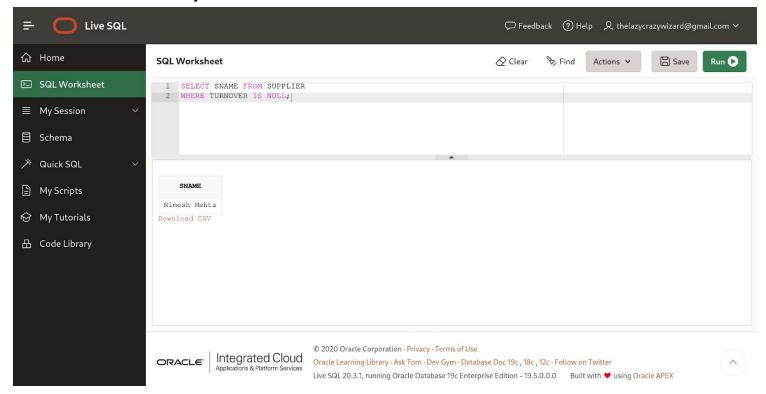
SELECT * FROM PART

WHERE WEIGH>=25 AND WEIGH<=35;



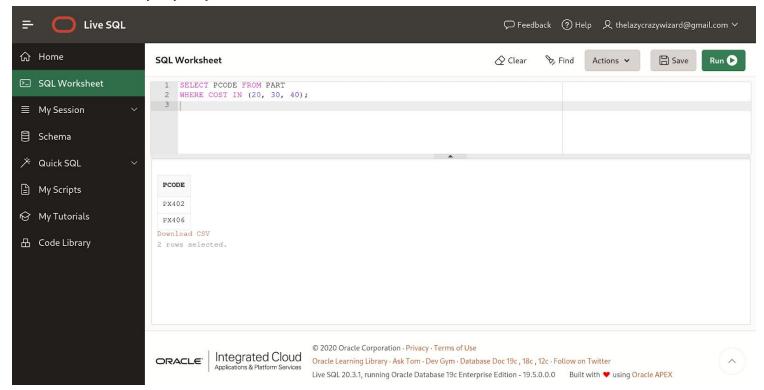
3.5. Get the supplier number whose turnover is null. 3.5.(solution)

SELECT SNAME FROM SUPPLIER WHERE TURNOVER IS NULL;



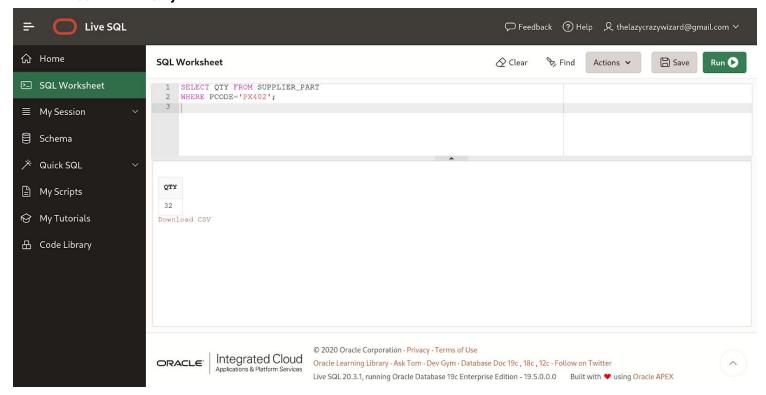
3.6. Get the part number that cost 20, 30 or 40 rupees. 3.6.(solution)

SELECT PCODE FROM PART WHERE COST IN (20, 30, 40);

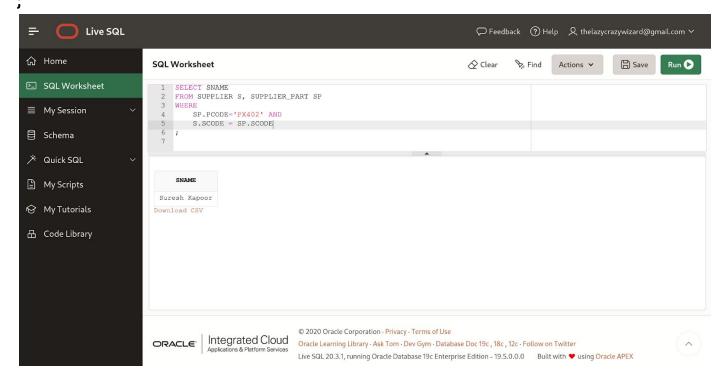


- 3.7. Get the total quantity of part 2 that is supplied.
- 3.7.(solution)

SELECT QTY FROM SUPPLIER_PART WHERE PCODE='PX402';



3.8. Get the name of supplier who supply part 2.
3.8.(solution)
SELECT SNAME
FROM SUPPLIER S, SUPPLIER_PART SP
WHERE
SP.PCODE='PX402' AND
S.SCODE = SP.SCODE



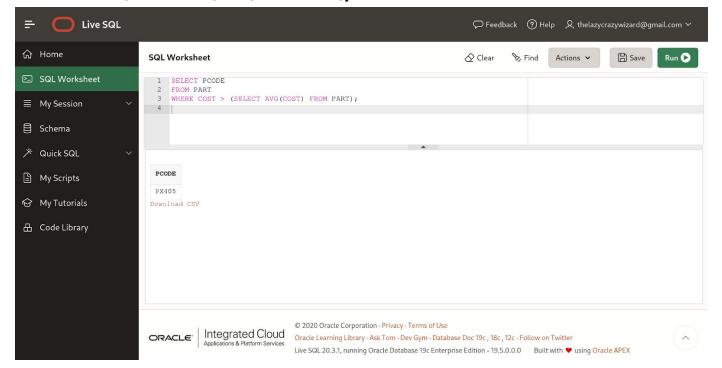
3.9. Get the part number whose cost is greater than the average cost.

3.9.(solution)

SELECT PCODE

FROM PART

WHERE COST > (SELECT AVG(COST) FROM PART);



3.10. Get the supplier number and turnover in descending order of turnover.3.10.(solution)

SELECT SCODE, TURNOVER FROM SUPPLIER ORDER BY TURNOVER DESC;

