Name: VENNELA G

Register No: 20BDS0146

Lab Course Name: Principles of Database Management Systems

Lab Slot: L29+L30

20BDS0146
VENNELA G

# EXERCISE 5

**Aim:** To understand the concept of Sub queries and logical tables in oracle

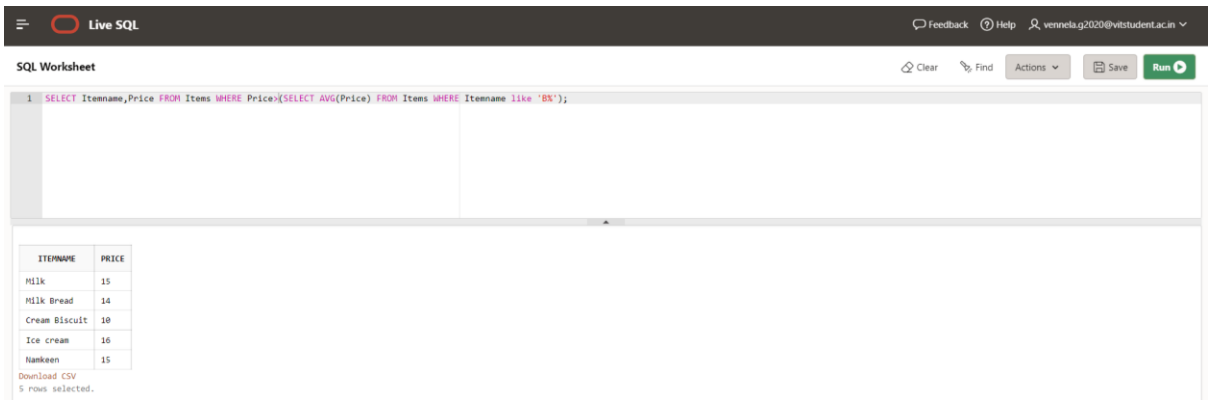
**Question: Execute the following queries based on the schema specified in exercise 1**

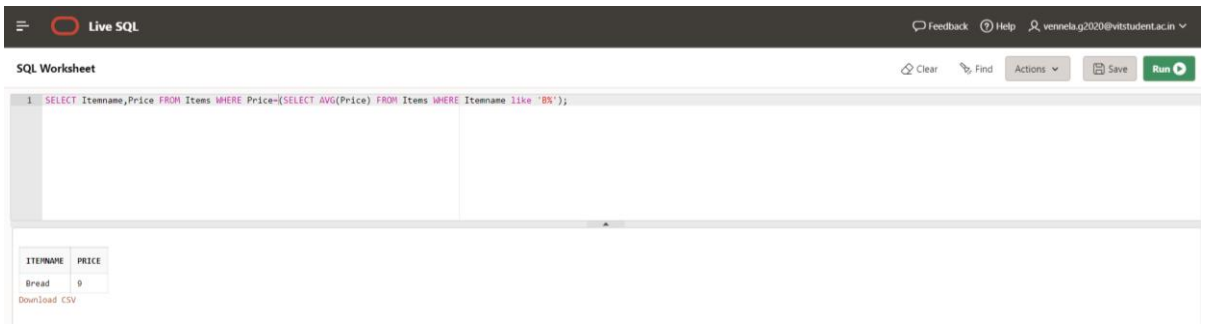


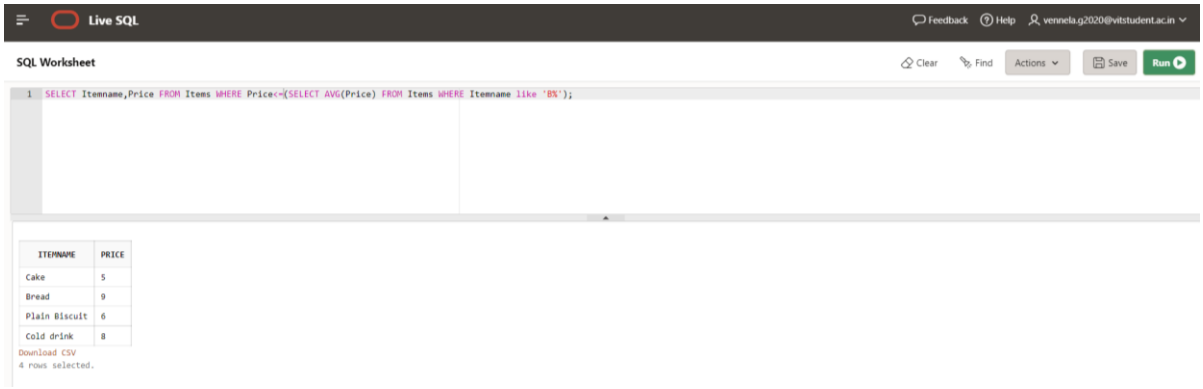
| SUPPNO | SUPPNAME | STATUS | CITY |
|---|---|---|---|
| 1 | Britannia | 10 | Delhi |
| 2 | New Bakers | 30 | Mumbai |
| 3 | Mother Dairy | 10 | Delhi |
| 4 | Cookz | 50 | Bangalore |
| 5 | Haldiram | 40 | Jaipur |
| 6 | Nestle | 70 | Kanpur |
| 7 | Cake wala | 20 | Tirupati |
| 8 | Bakers love | 30 | Chennai |
| 9 | Cooling shop | 10 | Shimla |


| ITEMNO | ITEMNAME | SUPPNO | PRICE |
|---|---|---|---|
| 11 | Milk | 1 | 15 |
| 13 | Cake | 2 | 5 |
| 17 | Bread | 3 | 9 |
| 27 | Milk Bread | 4 | 14 |
| 45 | Plain Biscuit | 5 | 6 |
| 34 | Cream Biscuit | 6 | 10 |
| 29 | Ice cream | 7 | 16 |
| 36 | Cold Drink | 8 | 8 |
| 41 | Namkeen | 9 | 15 |

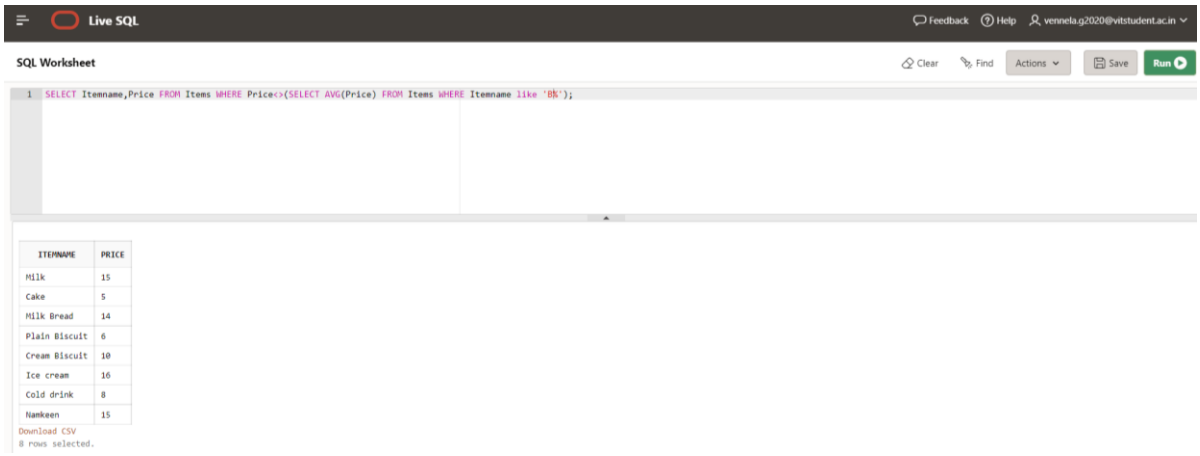

1. Use single row subqueries by applying all the comparison operators



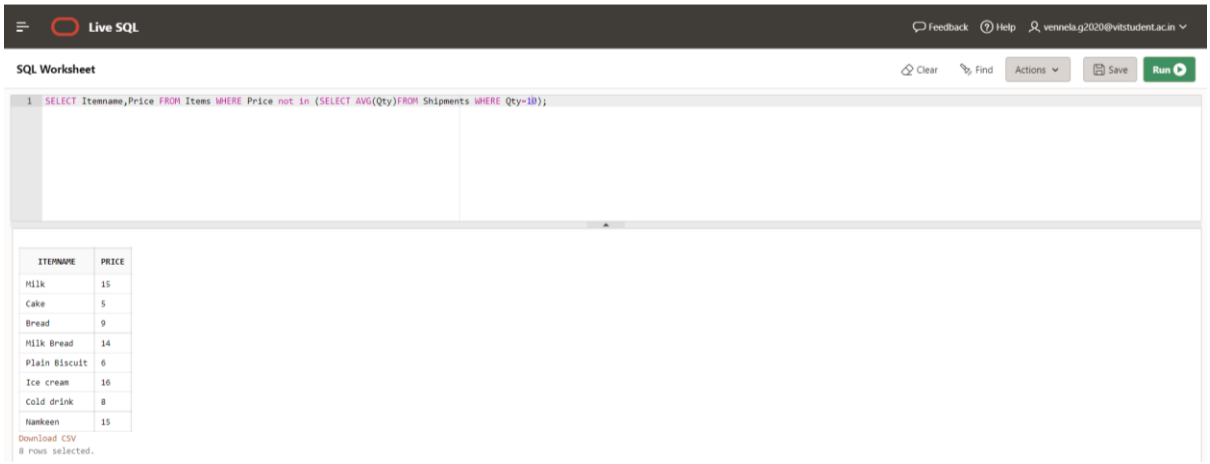



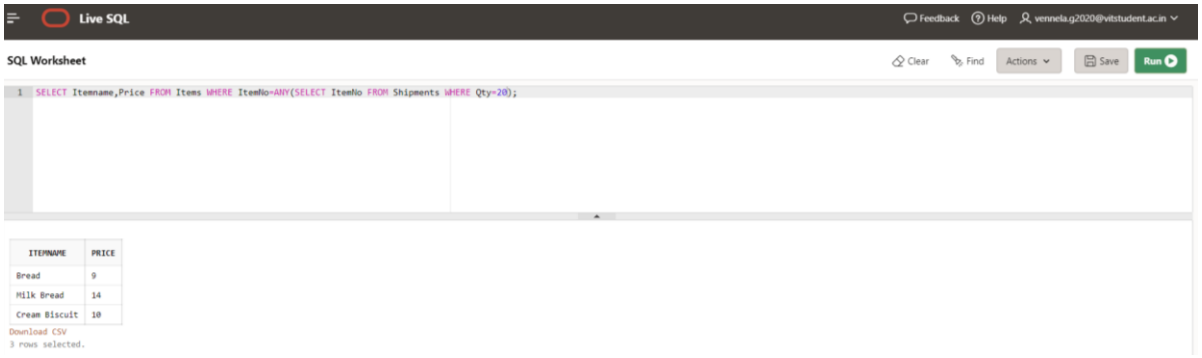


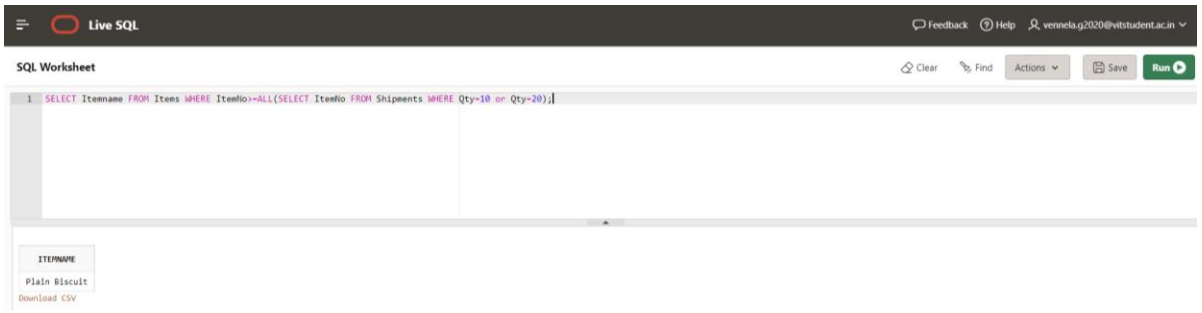




2. Use multiple row subqueries by applying all the operators (in, not in, all and any)

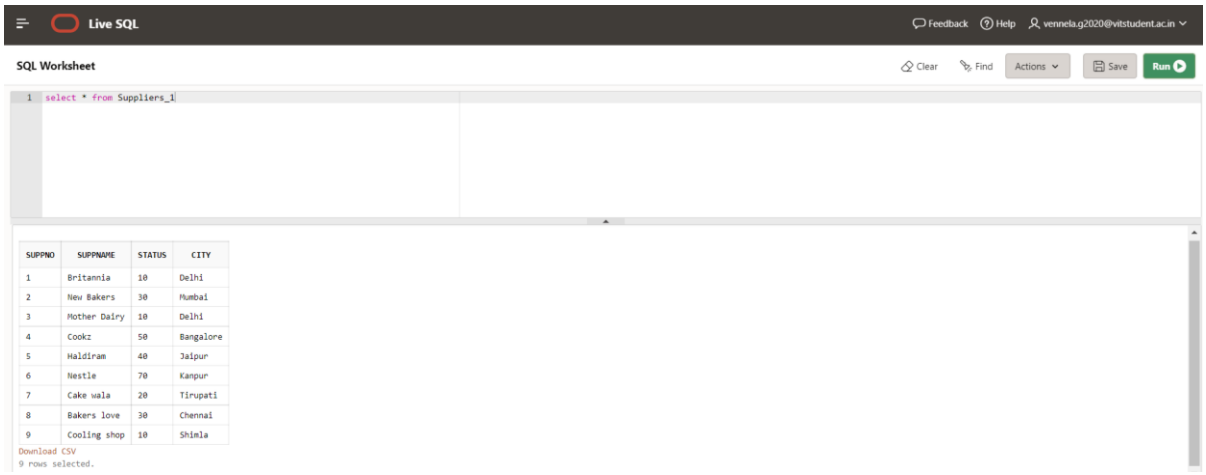


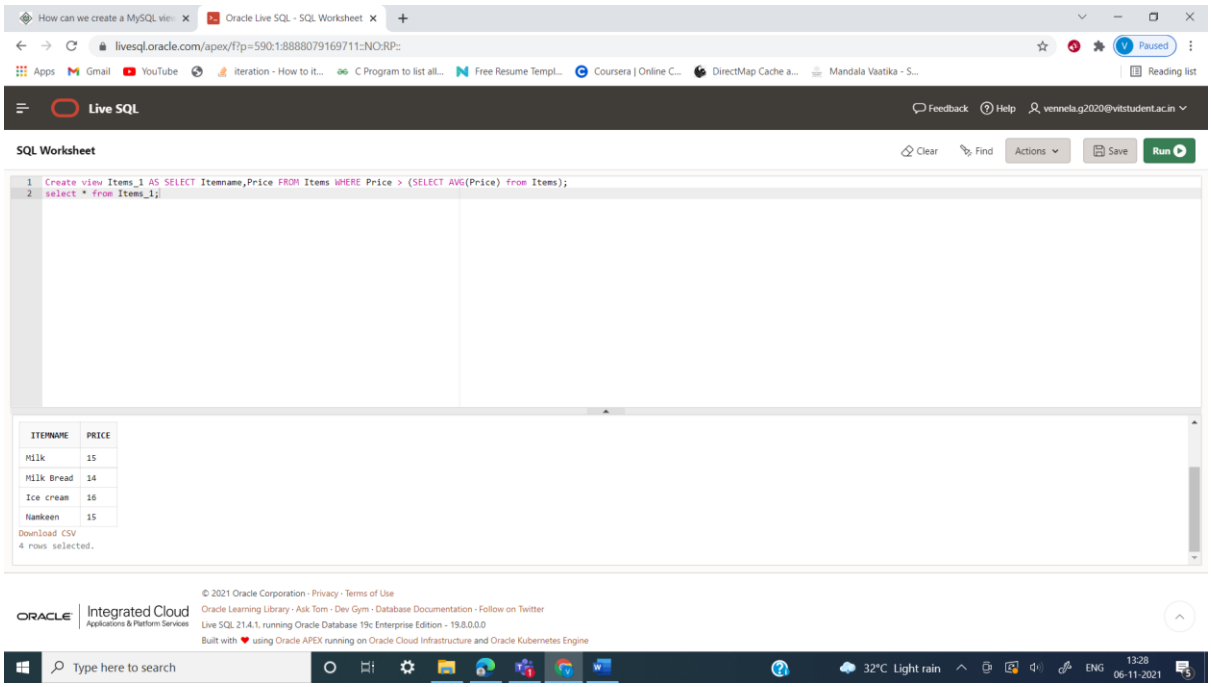




3. Apply a correlated subquery on the schema and retrieve relevant values.


4. Create a simple view.


5. Create a view using subquery.




# EXERCISE 6

**Aim:** To understand about retrieving data across multiple tables.

20BDS0146
VENNELA G

**Question: Execute the following queries based on the schema specified in exercise 1**



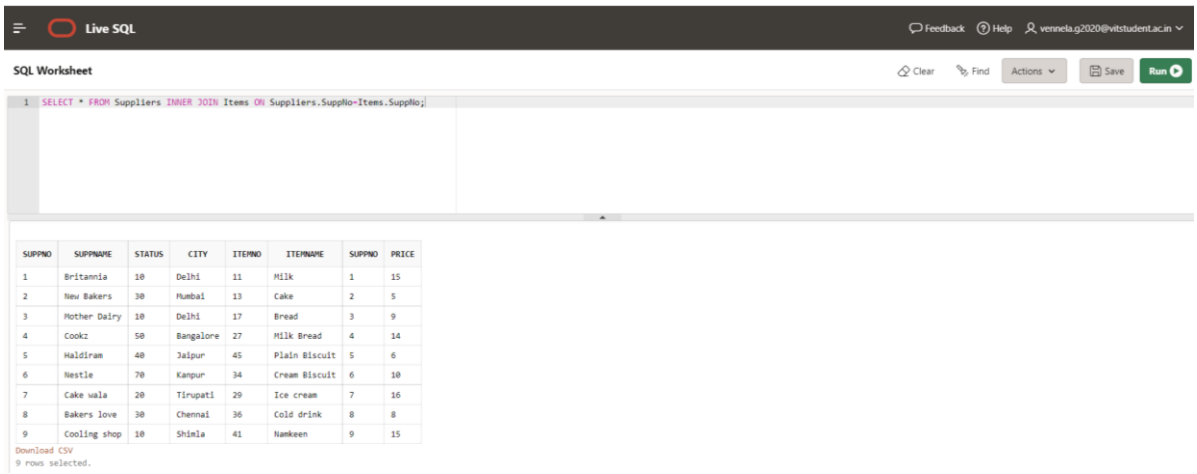
| SUPPNO | SUPPNAME | STATUS | CITY |
|---|---|---|---|
| 1 | Britannia | 10 | Delhi |
| 2 | New Bakers | 30 | Mumbai |
| 3 | Mother Dairy | 10 | Delhi |
| 4 | Cookz | 50 | Bangalore |
| 5 | Haldiram | 40 | Jaipur |
| 6 | Nestle | 70 | Kanpur |
| 7 | Cake wala | 20 | Tirupati |
| 8 | Bakers love | 30 | Chennai |
| 9 | Cooling shop | 10 | Shimla |


| ITEMNO | ITEMNAME | SUPPNO | PRICE |
|---|---|---|---|
| 11 | Milk | 1 | 15 |
| 13 | Cake | 2 | 5 |
| 17 | Bread | 3 | 9 |
| 27 | Milk Bread | 4 | 14 |
| 45 | Plain Biscuit | 5 | 6 |
| 34 | Cream Biscuit | 6 | 10 |
| 29 | Ice cream | 7 | 16 |
| 36 | Cold Drink | 8 | 8 |
| 41 | Namkeen | 9 | 15 |


| ITEMNO | QTY | MANUFACTUREDT |
|---|---|---|
| 13 | 10 | 20-JUL-20 |
| 17 | 20 | 21-OCT-19 |
| 34 | 20 | 19-NOV-19 |
| 27 | 20 | 15-DEC-20 |
| 45 | 10 | 17-JAN-21 |
| 11 | 10 | 23-FEB-20 |
| 29 | 10 | 12-MAR-21 |
| 36 | 30 | 11-APR-20 |
| 41 | 30 | 29-AUG-21 |

Download CSV

1. Retrieve values from 2 tables using a single join condition.




| SUPPNO | SUPPNAME | STATUS | CITY | ITEMNO | ITEMNAME | SUPPNO | PRICE |
|---|---|---|---|---|---|---|---|
| 1 | Britannia | 10 | Delhi | 11 | Milk | 1 | 15 |
| 2 | New Bakers | 30 | Mumbai | 13 | Cake | 2 | 5 |
| 3 | Mother Dairy | 10 | Delhi | 17 | Bread | 3 | 9 |
| 4 | Cookz | 50 | Bangalore | 27 | Milk Bread | 4 | 14 |
| 5 | Haldiram | 40 | Jaipur | 45 | Plain Biscuit | 5 | 6 |
| 6 | Nestle | 70 | Kanpur | 34 | Cream Biscuit | 6 | 10 |
| 7 | Cake wala | 20 | Tirupati | 29 | Ice cream | 7 | 16 |
| 8 | Bakers love | 30 | Chennai | 36 | Cold drink | 8 | 8 |
| 9 | Cooling shop | 10 | Shimla | 41 | Namkeen | 9 | 15 |

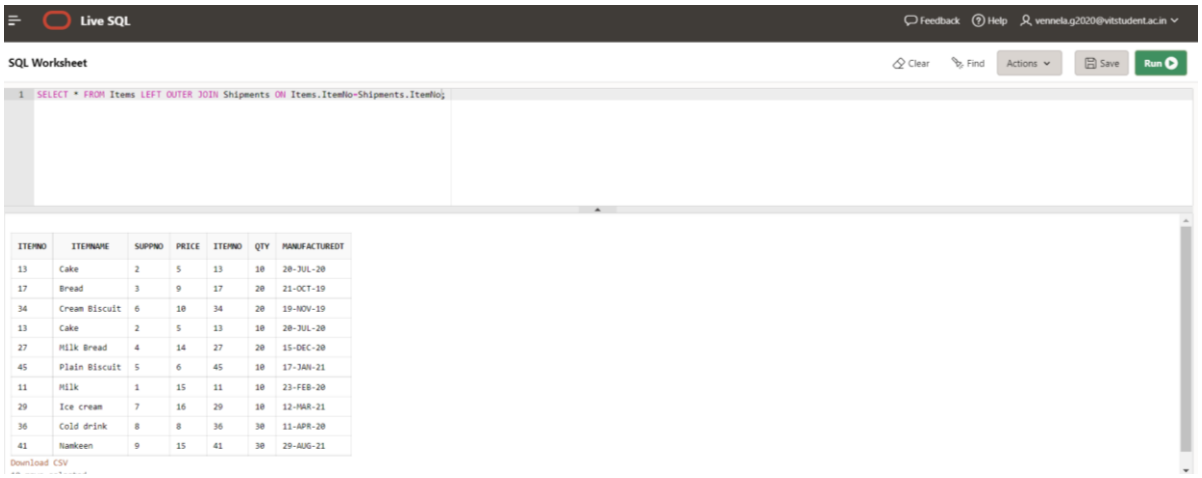
Download CSV
9 rows selected.

2. Retrieve values using natural join.


| SUPPNO | SUPPNAME | STATUS | CITY | ITEMNO | ITEMNAME | PRICE |
|---|---|---|---|---|---|---|
| 1 | Britannia | 10 | Delhi | 11 | Milk | 15 |
| 2 | New Bakers | 30 | Mumbai | 13 | Cake | 5 |
| 3 | Mother Dairy | 10 | Delhi | 17 | Bread | 9 |
| 4 | Cookz | 50 | Bangalore | 27 | Milk Bread | 14 |
| 5 | Haldiram | 40 | Jaipur | 45 | Plain Biscuit | 6 |
| 6 | Nestle | 70 | Kanpur | 34 | Cream Biscuit | 10 |
| 7 | Cake wala | 20 | Tirupati | 29 | Ice cream | 16 |
| 8 | Bakers love | 30 | Chennai | 36 | Cold drink | 8 |
| 9 | Cooling shop | 10 | Shimla | 41 | Namkeen | 15 |

Download CSV
9 rows selected.

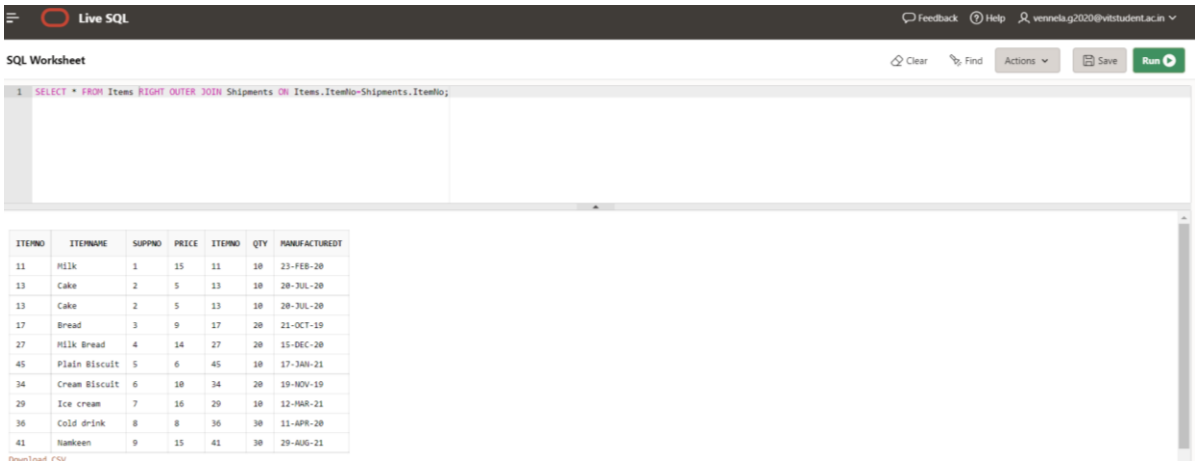
3. Fetch data from two or more tables using left outer join.




| ITEMNO | ITEMNAME | SUPPNO | PRICE | ITEMNO | QTY | MANUFACTUREDT |
|---|---|---|---|---|---|---|
| 13 | Cake | 2 | 5 | 13 | 10 | 20-JUL-20 |
| 17 | Bread | 3 | 9 | 17 | 20 | 21-OCT-19 |
| 34 | Cream Biscuit | 6 | 10 | 34 | 20 | 19-NOV-19 |
| 13 | Cake | 2 | 5 | 13 | 10 | 20-JUL-20 |
| 27 | Milk Bread | 4 | 14 | 27 | 20 | 15-DEC-20 |
| 45 | Plain Biscuit | 5 | 6 | 45 | 10 | 17-JAN-21 |
| 11 | Milk | 1 | 15 | 11 | 10 | 23-FEB-20 |
| 29 | Ice cream | 7 | 16 | 29 | 10 | 12-MAR-21 |
| 36 | Cold drink | 8 | 8 | 36 | 30 | 11-APR-20 |
| 41 | Namkeen | 9 | 15 | 41 | 30 | 29-AUG-21 |

Download CSV

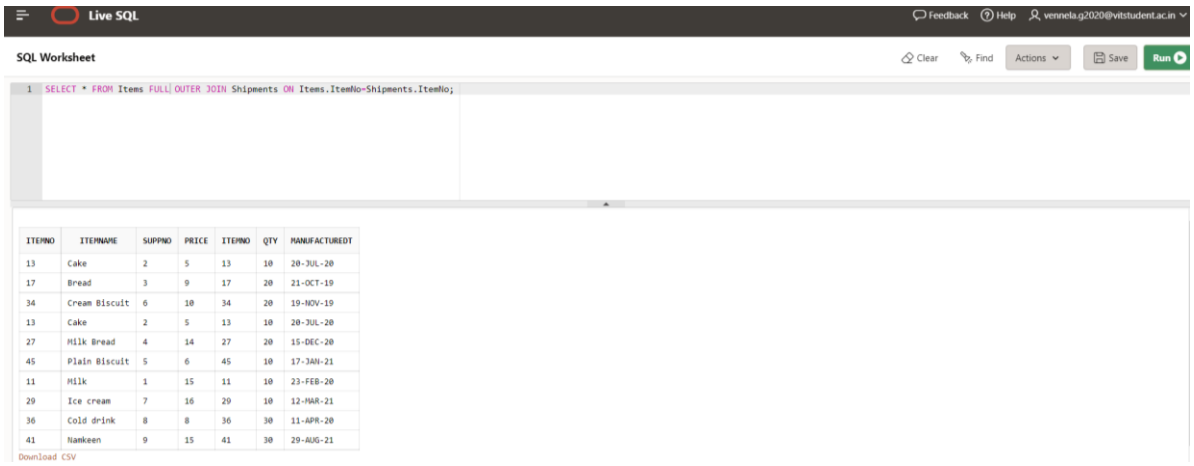
4. Fetch data from tables using right outer join.




| ITEMNO | ITEMNAME | SUPPNO | PRICE | ITEMNO | QTY | MANUFACTUREDT |
|---|---|---|---|---|---|---|
| 11 | Milk | 1 | 15 | 11 | 10 | 23-FEB-20 |
| 13 | Cake | 2 | 5 | 13 | 10 | 20-JUL-20 |
| 13 | Cake | 2 | 5 | 13 | 10 | 20-JUL-20 |
| 17 | Bread | 3 | 9 | 17 | 20 | 21-OCT-19 |
| 27 | Milk Bread | 4 | 14 | 27 | 20 | 15-DEC-20 |
| 45 | Plain Biscuit | 5 | 6 | 45 | 10 | 17-JAN-21 |
| 34 | Cream Biscuit | 6 | 10 | 34 | 20 | 19-NOV-19 |
| 29 | Ice cream | 7 | 16 | 29 | 10 | 12-MAR-21 |
| 36 | Cold drink | 8 | 8 | 36 | 30 | 11-APR-20 |
| 41 | Namkeen | 9 | 15 | 41 | 30 | 29-AUG-21 |

Download CSV

5. Fetch data from tables using full outer join.




| ITEMNO | ITEMNAME | SUPPNO | PRICE | ITEMNO | QTY | MANUFACTUREDT |
|---|---|---|---|---|---|---|
| 13 | Cake | 2 | 5 | 13 | 10 | 20-JUL-20 |
| 17 | Bread | 3 | 9 | 17 | 20 | 21-OCT-19 |
| 34 | Cream Biscuit | 6 | 10 | 34 | 20 | 19-NOV-19 |
| 13 | Cake | 2 | 5 | 13 | 10 | 20-JUL-20 |
| 27 | Milk Bread | 4 | 14 | 27 | 20 | 15-DEC-20 |
| 45 | Plain Biscuit | 5 | 6 | 45 | 10 | 17-JAN-21 |
| 11 | Milk | 1 | 15 | 11 | 10 | 23-FEB-20 |
| 29 | Ice cream | 7 | 16 | 29 | 10 | 12-MAR-21 |
| 36 | Cold drink | 8 | 8 | 36 | 30 | 11-APR-20 |
| 41 | Namkeen | 9 | 15 | 41 | 30 | 29-AUG-21 |

Download CSV

20BDS0146
VENNELA G

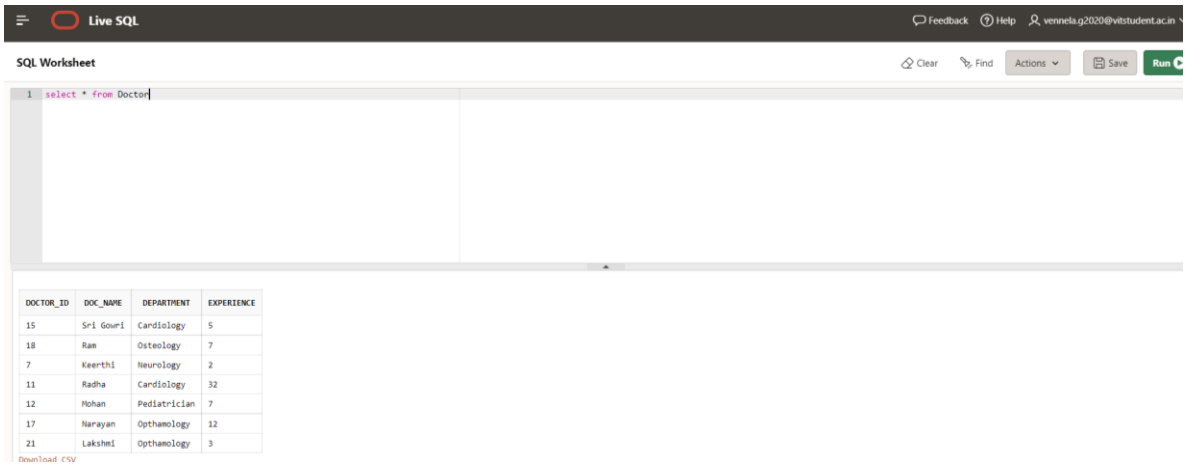
**Question: Create the below tables and insert values.**

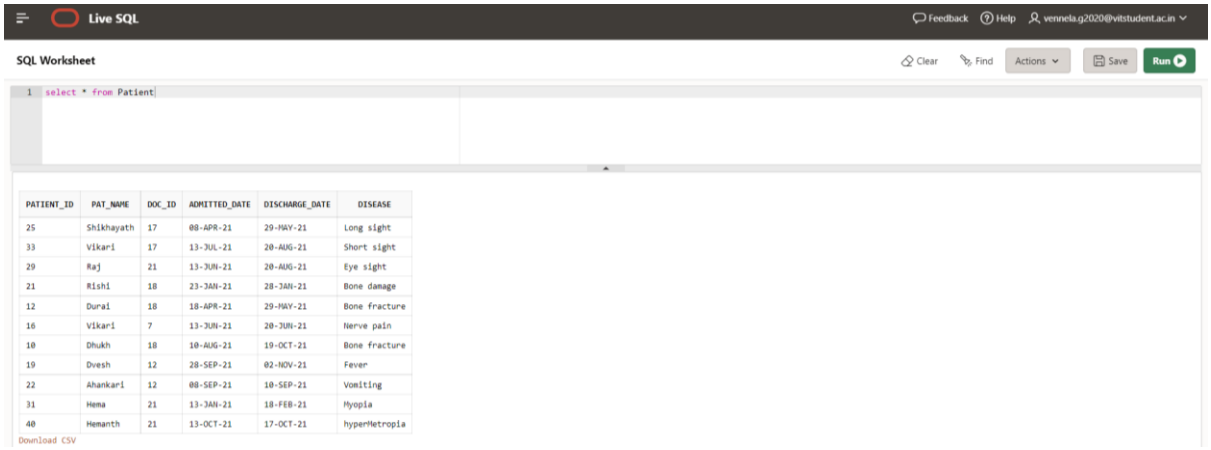
**Doctor ( Doctor Id, Name, department, experience)**

**Patient ( Patient Id, Name, Doc Id, Admitted date, discharge date, disease)**

**Use SQL to answer the below queries.**



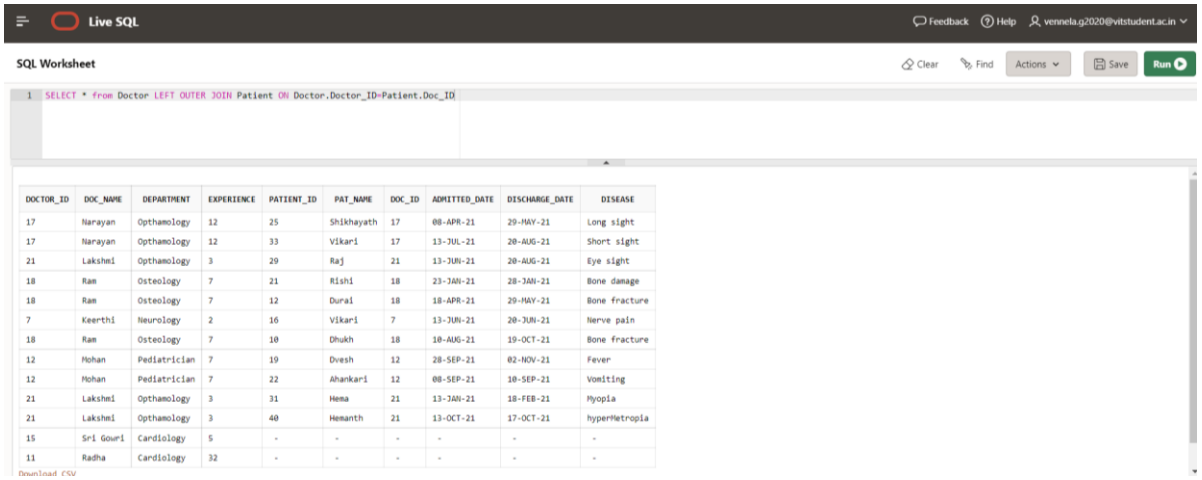





| PATIENT_ID | PAT_NAME | DOC_ID | ADMITTED_DATE | DISCHARGE_DATE | DISEASE |
|---|---|---|---|---|---|
| 25 | Shikhayath | 17 | 08-APR-21 | 29-MAY-21 | Long sight |
| 33 | Vikari | 17 | 13-JUL-21 | 20-AUG-21 | Short sight |
| 29 | Raj | 21 | 13-JUN-21 | 20-AUG-21 | Eye sight |
| 21 | Rishi | 18 | 23-JAN-21 | 28-JAN-21 | Bone damage |
| 12 | Durai | 18 | 18-APR-21 | 29-MAY-21 | Bone fracture |
| 16 | Vikari | 7 | 13-JUN-21 | 20-JUN-21 | Nerve pain |
| 10 | Dhukh | 18 | 10-AUG-21 | 19-OCT-21 | Bone fracture |
| 19 | Dvesh | 12 | 28-SEP-21 | 02-NOV-21 | Fever |
| 22 | Ahankari | 12 | 08-SEP-21 | 10-SEP-21 | Vomiting |
| 31 | Hema | 21 | 13-JAN-21 | 18-FEB-21 | Myopia |
| 40 | Hemanth | 21 | 13-OCT-21 | 17-OCT-21 | hyperMetropia |

Download CSV

1. Display the doctor details along with their patient details. Doctors without any patient should also be listed in the output.




| DOCTOR_ID | DOC_NAME | DEPARTMENT | EXPERIENCE | PATIENT_ID | PAT_NAME | DOC_ID | ADMITTED_DATE | DISCHARGE_DATE | DISEASE |
|---|---|---|---|---|---|---|---|---|---|
| 17 | Narayan | Opthamology | 12 | 25 | Shikhayath | 17 | 08-APR-21 | 29-MAY-21 | Long sight |
| 17 | Narayan | Opthamology | 12 | 33 | Vikari | 17 | 13-JUL-21 | 20-AUG-21 | Short sight |
| 21 | Lakshmi | Opthamology | 3 | 29 | Raj | 21 | 13-JUN-21 | 20-AUG-21 | Eye sight |
| 18 | Ram | Osteology | 7 | 21 | Rishi | 18 | 23-JAN-21 | 28-JAN-21 | Bone damage |
| 18 | Ram | Osteology | 7 | 12 | Durai | 18 | 18-APR-21 | 29-MAY-21 | Bone fracture |
| 7 | Keerthi | Neurology | 2 | 16 | Vikari | 7 | 13-JUN-21 | 20-JUN-21 | Nerve pain |
| 18 | Ram | Osteology | 7 | 10 | Dhukh | 18 | 10-AUG-21 | 19-OCT-21 | Bone fracture |
| 12 | Mohan | Pediatrician | 7 | 19 | Dvesh | 12 | 28-SEP-21 | 02-NOV-21 | Fever |
| 12 | Mohan | Pediatrician | 7 | 22 | Ahankari | 12 | 08-SEP-21 | 10-SEP-21 | Vomiting |
| 21 | Lakshmi | Opthamology | 3 | 31 | Hema | 21 | 13-JAN-21 | 18-FEB-21 | Myopia |
| 21 | Lakshmi | Opthamology | 3 | 40 | Hemanth | 21 | 13-OCT-21 | 17-OCT-21 | hyperMetropia |
| 15 | Sri Gowri | Cardiology | 5 | - | - | - | - | - | - |
| 11 | Radha | Cardiology | 32 | - | - | - | - | - | - |

Download CSV

2. Display the patient name and patient_id who were admitted more than a month in the hospital and serviced by a doctor in ophthalmology department.


| PAT_NAME | PATIENT_ID |
|---|---|
| Shikhayath | 25 |
| Vikari | 33 |
| Raj | 29 |
| Hema | 31 |

Download CSV
4 rows selected.

3. Retrieve the details of doctor who have more than 2 patients