

Assignment 1

Consider the following relational schema for a company and solve the following queries:

Supply (item_id, supplier_id, purchase_date, Quantity, unit_cost);

Material (item_id, item_name, make);

Queries:

- (a) Find the name of all materials supplied by 'S2' and make is 'Hindustan Liver'.
- (b) Find the purchase date of the item 'shampoo' having unit cost greater than Rs. 50.
- (c) Find all item name supplied by 'S5'.
- (d) List all the materials under the make 'Himalay'

SOLUTION:

```
mysql> create database a1mouli;  
Query OK, 1 row affected (0.08 sec)
```

```
mysql> show databases;
```

Database
a1mouli
information_schema
mysql
performance_schema
sakila
sys
world

7 rows in set (0.00 sec)

```
mysql> use a1mouli;
```

Database changed

```
mysql> create table Material
```

→ (item_id varchar(8) primary key, item_name varchar(20), make varchar(15));

Query OK, 0 rows affected (0.12 sec)

```
mysql> desc Material;
```

Field	Type	Null	Key	Default	Extra
item_id	varchar(8)	NO	PRI	NULL	
item_name	varchar(20)	YES		NULL	
make	varchar(15)	YES		NULL	

3 rows in set (0.00 sec)

```
mysql> create table Supply
```

→ (item_id varchar(8) references Material, supplier_id varchar(11), purchase_date Date, quantity integer(8), unit_cost float(10,2));

Query OK, 0 rows affected, 2 warnings (0.08 sec)

mysql> desc Supply;

Field	Type	Null	Key	Default	Extra
item_id	varchar(8)	YES		NULL	
supplier_id	varchar(11)	YES		NULL	
purchase_date	date	YES		NULL	
quantity	int	YES		NULL	
unit_cost	float(10,2)	YES		NULL	

5 rows in set (0.00 sec)

mysql> insert into Material VALUES('I1','Bannispaz','Himalaya');

Query OK, 1 row affected (0.04 sec)

mysql> insert into Material VALUES('I2','Lux','Hindustan Liver');

Query OK, 1 row affected (0.04 sec)

mysql> insert into Material VALUES('I3','Shampoo','Hindustan Liver');

Query OK, 1 row affected (0.04 sec)

mysql> insert into Material VALUES('I4','NaturalRedRosePow','Himalaya');

Query OK, 1 row affected (0.03 sec)

mysql> insert into Material VALUES('I5','Clearvital','Himalaya');

Query OK, 1 row affected (0.03 sec)

mysql> insert into Material VALUES('I6','Pepsodent ','Hindustan Liver');

Query OK, 1 row affected (0.03 sec)

mysql> insert into Material VALUES('I7','Lakme Kajal','Lakme');

Query OK, 1 row affected (0.04 sec)

mysql> insert into Material VALUES('I8','Dove','Hindustan Liver');

Query OK, 1 row affected (0.04 sec)

mysql> insert into Material VALUES('I9','Lakme Beauty','Lakme');

Query OK, 1 row affected (0.04 sec)

mysql> select *from Material;

item_id	item_name	make
I1	Bannispaz	Himalaya
I2	Lux	Hindustan Liver
I3	Shampoo	Hindustan Liver
I4	NaturalRedRosePow	Himalaya
I5	Clearvital	Himalaya
I6	Pepsodent	Hindustan Liver
I7	Lakme Kajal	Lakme
I8	Dove	Hindustan Liver
I9	Lakme Beauty	Lakme

9 rows in set (0.00 sec)

mysql> insert into Supply VALUES ('I4','S1','2022-09-17',12,2400.50);

Query OK, 1 row affected (0.04 sec)

```

mysql> insert into Supply VALUES ('I1','S2','2022-09-17',24,240.524);
Query OK, 1 row affected (0.01 sec)
mysql> insert into Supply VALUES ('I2','S2','2022-09-19',20,400.20);
Query OK, 1 row affected (0.04 sec)
mysql> insert into Supply VALUES ('I3','S3','2022-10-19',1500,1500.00);
Query OK, 1 row affected (0.04 sec)
mysql> insert into Supply VALUES ('I5','S4','2022-10-19',150,25500.04);
Query OK, 1 row affected (0.02 sec)
mysql> insert into Supply VALUES ('I9','S2','2022-10-20',15,9650.12);
Query OK, 1 row affected (0.04 sec)
mysql> insert into Supply VALUES ('I9','S5','2022-11-18',15,9650.12);
Query OK, 1 row affected (0.04 sec)
mysql> insert into Supply VALUES ('I8','S5','2022-11-18',250,65947.21);
Query OK, 1 row affected (0.04 sec)
mysql> insert into Supply VALUES ('I7','S4','2022-11-19',40,15000.12);
Query OK, 1 row affected (0.04 sec)
mysql> insert into Supply VALUES ('I6','S2','2022-11-19',100,2500.15);
Query OK, 1 row affected (0.01 sec)
mysql> insert into Supply VALUES ('I6','S5','2022-11-22',150,3750.75);
Query OK, 1 row affected (0.03 sec)
mysql> insert into Supply VALUES ('I5','S5','2022-11-22',30,30000.75);
Query OK, 1 row affected (0.01 sec)
mysql> insert into Supply VALUES ('I8','S2','2022-12-02',500,10000.25);
Query OK, 1 row affected (0.03 sec)

```

```
mysql> select *from Supply;
```

item_id	supplier_id	purchase_date	quantity	unit_cost
I4	S1	2022-09-17	12	2400.50
I1	S2	2022-09-17	24	240.52
I2	S2	2022-09-19	20	400.20
I3	S3	2022-10-19	1500	1500.00
I5	S4	2022-10-19	150	25500.04
I9	S2	2022-10-20	15	9650.12
I9	S5	2022-11-18	15	9650.12
I8	S5	2022-11-18	250	65947.21
I7	S4	2022-11-19	40	15000.12
I6	S2	2022-11-19	100	2500.15
I6	S5	2022-11-22	150	3750.75
I5	S5	2022-11-22	30	30000.75
I8	S2	2022-12-02	500	10000.25

```
13 rows in set (0.00 sec)
```

```
mysql> select item_name from Material M, Supply S where make = 'Hindustan Liver' and
M.item_id=S.item_id and supplier_id='S2';
```

item_name
Lux
Pepsodent G

```
| Dove |
+-----+
```

3 rows in set (0.00 sec)

```
mysql> select item_name from Material m, Supply S where M.item_id=S.item_id and
item_name='Shampoo' and unit_cost>50.00;
```

```
+-----+
| item_name |
+-----+
| Shampoo |
+-----+
```

1 row in set (0.00 sec)

```
mysql> select item_name from Material m, Supply S where M.item_id=S.item_id and
item_name='Shampoo' and unit_cost<50.00;
```

Empty set (0.00 sec)

```
mysql> select item_name from Material m, Supply S where M.item_id=S.item_id and
supplier_id='S5';
```

```
+-----+
| item_name |
+-----+
| Lakme Bridal |
| Dove |
| Pepsodent G |
| Clearvital |
+-----+
```

4 rows in set (0.00 sec)

```
mysql> select item_name from Material m, Supply S where M.item_id=S.item_id and
make='Himalaya';
```

```
+-----+
| item_name |
+-----+
| NaturalRedRosePow |
| Bannispaz |
| Clearvital |
| Clearvital |
+-----+
```

4 rows in set (0.00 sec)