

```
CREATE TABLE category (  
    id INT AUTO_INCREMENT,  
    name varchar(100) NOT NULL,  
    code varchar(100) NOT NULL,  
    PRIMARY KEY (id),  
    UNIQUE (code)  
);
```

```
CREATE TABLE products (  
    id INT auto_increment,  
    category_id integer NOT NULL,  
    name varchar(255) NOT NULL,  
    code varchar(100) NOT NULL,  
    price integer NOT NULL,  
    PRIMARY KEY (id),  
    FOREIGN KEY (category_id) REFERENCES category(id) ON DELETE CASCADE  
);
```

```
CREATE TABLE location (  
    id INT AUTO_INCREMENT,  
    name varchar(100) NOT NULL,  
    code varchar(100) NOT NULL,  
    PRIMARY KEY (id),  
    UNIQUE (code)
```

);

```
CREATE TABLE sales_executives (  
    id INT auto_increment,  
    loc_id integer NOT NULL,  
    name varchar(255) NOT NULL,  
    gender varchar(50) NOT NULL,  
    phone varchar(100) NOT NULL,  
    dob date,  
    PRIMARY KEY (id),  
    FOREIGN KEY (loc_id) REFERENCES location(id) ON DELETE CASCADE  
);
```

```
CREATE TABLE customers (  
    id INT AUTO_INCREMENT,  
    name varchar(100) NOT NULL,  
    gender varchar(50) NOT NULL,  
    phone varchar(100) NOT NULL,  
    dob date,  
    PRIMARY KEY (id)  
);
```

```
CREATE TABLE purchases (  
    id INT AUTO_INCREMENT,  
    customer_id int NOT NULL,
```

```
seller_id int NOT NULL,  
  
purchase_units int,  
  
purchase_date date,  
  
product_code varchar(100) NOT NULL,  
  
PRIMARY KEY (id),  
  
FOREIGN KEY (customer_id) REFERENCES customers(id) ON DELETE CASCADE,  
  
FOREIGN KEY (seller_id) REFERENCES sales_executives(id) ON DELETE CASCADE  
  
);
```

```
INSERT INTO category (id, name, code) VALUES
```

```
(default, 'CLOTHES', 'CLTH'),  
  
(default, 'GADGETS', 'GDTS'),  
  
(default, 'BOOKS', 'BKS');
```

```
INSERT INTO products (id, category_id, name, code, price) VALUES
```

```
(default, 1, 'Mens Shirt', 'P001', 1000),  
  
(default, 2, 'Watch', 'P002', 2500),  
  
(default, 3, 'Dictionary', 'P003', 400),  
  
(default, 1, 'Mens Pants', 'P004', 1500),  
  
(default, 2, 'ipod', 'P005', 5500),  
  
(default, 3, 'Magazine', 'P006', 200);
```

```
INSERT INTO location (id, name, code) VALUES
```

```
(default, 'San Francisco', 'SA'),  
  
(default, 'Boston', 'MA'),
```

```
(default, 'Chicago', 'CA');
```

```
INSERT INTO sales_executives (id, loc_id, name, gender, phone, dob) VALUES
```

```
(default, 1, 'Mary Parker', 'Male', '981483029127', '1972-07-03'),
```

```
(default, 2, 'John Mayer', 'Male', '857300923713', '1982-07-03'),
```

```
(default, 3, 'Alice Walker', 'Female', '923120967812', '1968-07-03'),
```

```
(default, 1, 'Jane Parker', 'Male', '981483029127', '1972-07-03');
```

```
INSERT INTO customers (id, name, gender, phone, dob) VALUES
```

```
(default, 'Cary Flint', 'Male', '981483029127', '1972-07-03'),
```

```
(default, 'John Smith', 'Male', '857300923713', '1982-07-03'),
```

```
(default, 'Jane Doe', 'Female', '923120967812', '1968-07-03');
```

```
INSERT INTO purchases (id, customer_id, seller_id, purchase_units, purchase_date, product_code)  
VALUES
```

```
(default, 1, 1, 4, '2021-02-13', 'P001'),
```

```
(default, 3, 2, 5, '2021-02-13', 'P002'),
```

```
(default, 1, 1, 3, '2021-02-12', 'P001'),
```

```
(default, 2, 1, 4, '2021-02-11', 'P003'),
```

```
(default, 1, 1, 4, '2021-02-10', 'P001'),
```

```
(default, 2, 1, 4, '2021-02-09', 'P002'),
```

```
(default, 3, 1, 4, '2021-02-08', 'P001'),
```

```
(default, 2, 1, 6, '2021-02-12', 'P003'),
```

```
(default, 3, 1, 7, '2021-02-11', 'P001'),
```

```
(default, 2, 3, 6, '2021-02-10', 'P002'),
```

```
(default, 3, 1, 5, '2021-02-09', 'P001'),
```

```
(default, 1,1, 2,'2021-02-08','P003'),
(default, 1,4, 10,'2021-02-13','P002'),
(default, 1,4, 3,'2021-02-05','P001');
```

##Query1

SELECT

p.id as 'id',

MAX(p1.purchase_units),

p1.purchase_date as 'date',

p.name as 'Product'

From

purchases p1

Left JOIN products p on p1.product_code = p.code

INNER JOIN (SELECT * from sales_executives where loc_id in (SELECT id from location where name ="San Francisco")) s on p1.seller_id = s.id

where p1.purchase_date BETWEEN DATE_SUB(CURRENT_DATE(), INTERVAL 1 WEEK) AND
CURRENT_DATE()

group by p1.purchase_date;

	id	MAX(p1.purchase_units)	date	Product
▶	1	10	2021-02-13	Mens Shirt
	1	6	2021-02-12	Mens Shirt
	3	7	2021-02-11	Dictionary
	1	4	2021-02-10	Mens Shirt
	2	5	2021-02-09	Watch
	1	4	2021-02-08	Mens Shirt

##Query2

SELECT

s.*,

SUM(p.purchase_units) as total_prod_sold

FROM

sales_executives s

LEFT JOIN purchases p on s.id = p.seller_id

group by s.name;

	id	loc_id	name	gender	phone	dob	total_prod_sold
▶	1	1	Mary Parker	Male	981483029127	1972-07-03	43
	2	2	John Mayer	Male	857300923713	1982-07-03	5
	3	3	Alice Walker	Female	923120967812	1968-07-03	6
	4	1	Jane Parker	Male	981483029127	1972-07-03	13