```sql
--** Create_Schema.sql **
--Create Product table
create table Products
(
product varchar(255),
price_effective_date date,
price int
);


--Create Sales Table
create table Sales
(
product varchar(255),
sales_date date,
quantity int
);
```

**Commands completed successfully.**

**Total execution time: 00:00:00.040**

```sql
-- ** Load_Data.sql **
--Load data in the Product table
insert into Products values ('product_1','2018-01-01',50);
insert into Products values ('product_2','2018-01-01',40);
insert into Products values ('product_1','2018-01-03',25);
insert into Products values ('product_2','2018-01-05',20);
insert into Products values ('product_1','2018-01-10',50);
insert into Products values ('product_2','2018-01-12',40);


--Load table in the Sales Table
insert into Sales values ( 'product_1','2018-01-01',10);
insert into Sales values ( 'product_2','2018-01-02',12);
insert into Sales values ( 'product_1','2018-01-04',50);
insert into Sales values ( 'product_2','2018-01-06',70);
insert into Sales values ( 'product_1','2018-01-12',8);
insert into Sales values ( 'product_2','2018-01-15',9);
```

**(1 row affected)**

**(1 row affected)**

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**Total execution time: 00:00:00.072**

```
select * from Products;
select * from Sales;
```

**(6 rows affected)**

**(6 rows affected)**

**Total execution time: 00:00:00.063**

Out[6]:

| product | price_effective_date | price |
|---------|---------------------|-------|
| product_1 | 2018-01-01 | 50 |
| product_2 | 2018-01-01 | 40 |
| product_1 | 2018-01-03 | 25 |
| product_2 | 2018-01-05 | 20 |
| product_1 | 2018-01-10 | 50 |
| product_2 | 2018-01-12 | 40 |

Out[6]:

| product | sales_date | quantity |
|---------|-----------|----------|
| product_1 | 2018-01-01 | 10 |
| product_2 | 2018-01-02 | 12 |
| product_1 | 2018-01-04 | 50 |
| product_2 | 2018-01-06 | 70 |
| product_1 | 2018-01-12 | 8 |
| product_2 | 2018-01-15 | 9 |

In [4]:

```
-- ** Calculate Total Revenue **
--Logic to calculate the total revenue
--Calculation is as below
--We get  price for max[(price_effective_Date)<=sales_date] record for the related product in Products table.
--If we had to
--Question 1 Answer:Total Revenue is 4390.
--Question 2 Answer : Below
    SELECT sum(quantity*price) as "Total_Revenue" from (select
        s.quantity
        ,(SELECT TOP 1 p.price
        FROM products AS p
        WHERE p.price_Effective_Date <= s.Sales_Date and p.product=s.product
        ORDER BY p.price_Effective_Date DESC) AS Price
    FROM
        sales s) x
```

**(1 row affected)**

**Total execution time: 00:00:00.042**

Out[4]:

| Total_Revenue |
|---------------|
| 4390 |