Databases and SQL – Ex5

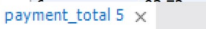**Question 1**:

```
use sakila;
CREATE VIEW payment_total AS
   SELECT
      customer_id, SUM(amount) AS `Sum`
   FROM
      payment
   GROUP BY customer_id;
```

This view is not updateable because it contains an aggregate function [sum()].

customer_id	Sum
1	118.68
2	128.73
3	135.74
4	81.78
5	144.62

Output → payment_total 5 ×

Question 2:

```
SELECT * FROM customer
WHERE email LIKE 'S%';
```

Query cost: 61.15

query_block #1

61.15   599 rows

Full Table Scan
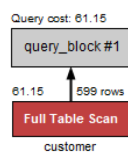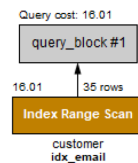
customer

Output →

Question 3:

```
CREATE INDEX idx_email
ON customer (email);
```

Question 4:

```
SELECT * FROM customer
WHERE email LIKE 'S%';
```

We got 'Index range scan' Instead of a full table scan, which means there was no longer need to check each item to see if it fits our 'WHERE' statement.

Output →

Question 5:

```
SELECT
    customer_id,
    CONCAT(MONTH(payment_date),
        '/',
        YEAR(payment_date)) AS `month`,
    SUM(amount)
FROM
    payment
GROUP BY customer_id , `month` WITH ROLLUP;
```

Output →