SQL\_ASSIGNMENT\_2\_by\_AY

**a. CREATE TABLE NAMED “Actions” AND INSERT COLUMNS (Visitor\_id, Adv\_type, Action) WITH VALUES GIVEN.**

CREATE TABLE Actions

(

Visitor\_id INT NOT NULL,

Adv\_Type VARCHAR(10) NOT NULL,

Action VARCHAR(20) NOT NULL,

);

INSERT INTO Actions (Visitor\_id, Adv\_Type, Action)

VALUES

(1,'A', 'Left'),

(2,'A', 'Order'),

(3,'B', 'Left'),

(4,'A', 'Order'),

(5,'A', 'Review'),

(6,'A', 'Left'),

(7,'B', 'Left'),

(8,'B', 'Order'),

(9,'B', 'Review'),

(10,'A', 'Review');

**b. RETRIEVE COUNT OF TOTAL ACTIONS AND ORDERS FOR EACH ADVERTISEMENT TYPE.**

SELECT Adv\_Type,

SUM(CASE WHEN Action like 'Order' THEN 1 ELSE 0 END) as Orders,

SUM(CASE WHEN Action like 'Left' THEN 1 ELSE 0 END) as Lefts,

SUM(CASE WHEN Action like 'Review' THEN 1 ELSE 0 END) as Reviews,

SUM(CASE WHEN Action like '%%' THEN 1 ELSE 0 END) as Total\_Order

INTO rates

FROM Actions

GROUP BY Adv\_Type;

SELECT \* FROM rates

Output:

Adv\_Type Orders Lefts Reviews Total\_Order

A 2 2 2 6

B 1 2 1 4

**c. CALCULATE ORDERS(CONVERSION) RATE FOR EACH ADVERTISEMENT TYPE BY DIVIDING BY TOTAL COUNT OF ACTIONS CASTING AS FLOAT BY MULTIPLYING 1.0**

SELECT Adv\_Type,

ROUND ((CAST(Orders AS FLOAT)/CAST(Orders + Lefts + Reviews AS FLOAT)),2) AS Conversion\_rate

FROM rates

ORDER BY Adv\_Type ASC;

Output:

Adv\_Type Conversion\_rate

A 0.33

B 0.25