# NIKET CHAKRABORTY ASSIGNMENT 2 ANSWER COPY

## Task-1 MSSQL Query:

```sql
1) Create a user-defined functions to stuff the Chicken into 'Quick Bites'. Eg: 'Quick
   Chicken Bites'
   CREATE FUNCTION DBO.FN_ChickenBites
   (@InputString VARCHAR(MAX))
   RETURNS VARCHAR(MAX)
   AS
   BEGIN
      DECLARE @OutputString VARCHAR(MAX)
      SET @OutputString = REPLACE(@InputString, 'Bites', 'Chicken Bites')
      RETURN @OutputString
   END;

   SELECT TOP 10
   dbo.FN_ChickenBites(RestaurantType) AS ModifiedResType
   FROM JomatoSales
   WHERE RestaurantType = 'Quick Bites';
```

## Task-1 Result:

| | ModifiedResType |
|---|---|
| 1 | Quick Chicken Bites |
| 2 | Quick Chicken Bites |
| 3 | Quick Chicken Bites |
| 4 | Quick Chicken Bites |
| 5 | Quick Chicken Bites |
| 6 | Quick Chicken Bites |
| 7 | Quick Chicken Bites |
| 8 | Quick Chicken Bites |
| 9 | Quick Chicken Bites |
| 10 | Quick Chicken Bites |

## Task-2 MSSQL Query:

```sql
2) Use the function to display the restaurant name and cuisine type which
   has the maximum number of rating.

   SELECT
      RestaurantName, CuisinesType
   FROM JomatoSales
   WHERE
      No_of_Rating = (SELECT MAX(No_of_Rating) FROM JomatoSales);
```

## Task-2 Result:

| | RestaurantName | CuisinesType |
|---|---|---|
| 1 | Byg Brewski Brewing Company | Continental, North Indian, Italian, South India... |

## Task-3 MSSQL Query:

```
3) Create a Rating Status column to display the rating as 'Excellent' if it has more
   than 4 start rating, 'Good' if it has above 3.5 and below 4 star rating, 'Average'
   if it above 3 star and below 3.5 star rating and 'Bad' if it is below 3 star rating
   SELECT TOP 10
       ROUND(CAST(Rating AS FLOAT),2) AS Rating,
       RatingStatus =
       CASE
       WHEN Rating > 4 THEN 'Excellent'
       WHEN Rating BETWEEN 3.5 AND 4 THEN 'Good'
       WHEN Rating BETWEEN 3 AND 3.5 THEN 'Average'
       ELSE 'Bad'
       END
       FROM JomatoSales;
```

## Task-3 Result:

| | Rating | RatingStatus |
|---|---|---|
| 1 | 3.9 | Good |
| 2 | 3.7 | Good |
| 3 | 2.7 | Bad |
| 4 | 2.8 | Bad |
| 5 | 3.4 | Average |
| 6 | 4.1 | Excellent |
| 7 | 2.8 | Bad |
| 8 | 3.2 | Average |
| 9 | 3.7 | Good |
| 10 | 3.5 | Good |

## Task-4 MSSQL Query:

```
4A) Find Ceil, floor and absolute values of the rating column
    SELECT TOP 10
            ROUND(CAST(Rating AS FLOAT),2) AS Rating,
            CEILING(Rating) AS Ceil_Value,
            FLOOR(Rating) AS Floor_Value,
            ROUND(ABS(CAST(Rating AS FLOAT)),2) AS Absolute_Value
    FROM JomatoSales;
```

```
4B) Display the current date and separatelty display the year
    month_name and day
    SELECT
       CONVERT(DATE, GETDATE()) AS CurrentDate,
       DATEPART(YEAR, GETDATE()) AS CurrentYear,
       DATENAME(MONTH, GETDATE()) AS Month_Name,
       DATEPART(DAY, GETDATE()) AS DayNum;
```

## Task-4 Result:

### Answer of 4A)

| | Rating | Ceil_Value | Floor_Value | Absolute_Value |
|---|---|---|---|---|
| 1 | 3.9 | 4 | 3 | 3.9 |
| 2 | 3.7 | 4 | 3 | 3.7 |
| 3 | 2.7 | 3 | 2 | 2.7 |
| 4 | 2.8 | 3 | 2 | 2.8 |
| 5 | 3.4 | 4 | 3 | 3.4 |
| 6 | 4.1 | 5 | 4 | 4.1 |
| 7 | 2.8 | 3 | 2 | 2.8 |
| 8 | 3.2 | 4 | 3 | 3.2 |
| 9 | 3.7 | 4 | 3 | 3.7 |
| 10 | 3.5 | 4 | 3 | 3.5 |

| | CurrentDate | CurrentYear | Month_Name | DayNum |
|---|---|---|---|---|
| 1 | 2025-02-24 | 2025 | February | 24 |

## Task-5 MSSQL Query:

```sql
5) Display the restaurant type and total average cost using roll up
SELECT
   RestaurantType,
   SUM(AverageCost) AS TotalAvgCost
FROM JomatoSales
GROUP BY ROLLUP(RestaurantType);
```

## Task-5 Result:

| | RestaurantType | TotalAvgCost |
|---|---|---|
| 1 | Bakery | 53770 |
| 2 | Bakery, Beverage Shop | 250 |
| 3 | Bakery, Cafe | 4100 |
| 4 | Bakery, Dessert Parlor | 5200 |
| 5 | Bakery, Quick Bites | 6300 |
| 6 | Bar | 104400 |
| 7 | Bar, Casual Dining | 71750 |
| 8 | Bar, Lounge | 4900 |
| 9 | Bar, Pub | 850 |
| 10 | Beverage Shop | 24350 |
| 11 | Beverage Shop, Cafe | 500 |
| 12 | Beverage Shop, Dessert Parlor | 2050 |
| 13 | Beverage Shop, Quick Bites | 6700 |
| 14 | Bhojanalya | 300 |
| 15 | Cafe | 234150 |
| 16 | Cafe, Bakery | 6500 |
| 17 | Cafe, Bar | 1200 |
| 18 | Cafe, Casual Dining | 15500 |
| 19 | Cafe, Dessert Parlor | 10200 |
| 20 | Cafe, Lounge | 1000 |
| 21 | Cafe, Quick Bites | 4950 |
| 22 | Casual Dining | 1220950 |
| 23 | Casual Dining, Bar | 138650 |
| 24 | Casual Dining, Cafe | 26500 |
| 25 | Casual Dining, Irani Cafee | 1300 |
| 26 | Casual Dining, Lounge | 3700 |

| | RestaurantType | TotalAvgCost |
|---|---|---|
| 54 | Lounge | 102750 |
| 55 | Lounge, Bar | 9300 |
| 56 | Lounge, Cafe | 1600 |
| 57 | Lounge, Casual Dining | 11200 |
| 58 | Lounge, Microbrewery | 2000 |
| 59 | Mess | 12000 |
| 60 | Microbrewery | 9600 |
| 61 | Microbrewery, Bar | 1200 |
| 62 | Microbrewery, Casual Dining | 26800 |
| 63 | Microbrewery, Lounge | 1700 |
| 64 | Microbrewery, Pub | 13800 |
| 65 | Pub | 41150 |
| 66 | Pub, Bar | 2100 |
| 67 | Pub, Casual Dining | 32200 |
| 68 | Pub, Microbrewery | 10600 |
| 69 | Quick Bites | 860740 |
| 70 | Quick Bites, Bakery | 1450 |
| 71 | Quick Bites, Beverage Shop | 3450 |
| 72 | Quick Bites, Cafe | 1650 |
| 73 | Quick Bites, Dessert Parlor | 2550 |
| 74 | Quick Bites, Food Court | 200 |
| 75 | Quick Bites, Meat Shop | 350 |
| 76 | Quick Bites, Mess | 400 |
| 77 | Quick Bites, Sweet Shop | 2300 |
| 78 | Sweet Shop | 10550 |
| 79 | Sweet Shop, Quick Bites | 6600 |
| 80 | Takeaway | 4650 |
| 81 | Takeaway, Delivery | 111939 |
| 82 | NULL | 3807739 |