**Q: 1**

**L0: Mongo Aggregations Sales Data Analysis**

**L0: MongoDB Aggregation Queries**

**Instructions:**

* Insert the provided dataset into your MongoDB collection.
* Solve the aggregation queries and write your answers in **query.txt**.
* Submit your **query.txt** file after completing all tasks.

**Dataset: sales Collection**

[

{

"saleId": 1,

"product": "Laptop",

"category": "Electronics",

"amount": 800,

"date": "2024-01-10",

"region": "North"

},

{

"saleId": 2,

"product": "Mobile",

"category": "Electronics",

"amount": 500,

"date": "2024-02-15",

"region": "South"

},

{

"saleId": 3,

"product": "Shoes",

"category": "Fashion",

"amount": 200,

"date": "2024-01-20",

"region": "North"

},

{

"saleId": 4,

"product": "TV",

"category": "Electronics",

"amount": 1000,

"date": "2024-03-05",

"region": "West"

},

{

"saleId": 5,

"product": "T-shirt",

"category": "Fashion",

"amount": 50,

"date": "2024-02-25",

"region": "East"

},

{

"saleId": 6,

"product": "Headphones",

"category": "Electronics",

"amount": 150,

"date": "2024-04-01",

"region": "South"

},

{

"saleId": 7,

"product": "Watch",

"category": "Fashion",

"amount": 300,

"date": "2024-03-15",

"region": "North"

},

{

"saleId": 8,

"product": "Laptop",

"category": "Electronics",

"amount": 850,

"date": "2024-02-12",

"region": "West"

},

{

"saleId": 9,

"product": "Shoes",

"category": "Fashion",

"amount": 250,

"date": "2024-04-18",

"region": "South"

}

]

**Tasks:**

1. Calculate the **total sales amount for each product category**.
2. Determine the **month-wise total sales amount**.
3. Identify the **highest-selling product (by revenue)**.
4. Find the **average sale amount** across all transactions.
5. Count the **number of sales made in each month**.
6. Determine the **total sales per region**.
7. Identify the **top 3 highest revenue-generating products**.
8. Find the **total number of sales transactions per category**.
9. Determine the **average sales amount for each region**.
10. Find the **total sales for Electronics and Fashion categories separately**.