

Experiment No.4 c : MongoDB – Map-reduce operations: Implement Map-reduce operation with suitable example using MongoDB.

Code:

```
db.sales.insertMany([
  { _id: 1, product: "A", amount: 100 },
  { _id: 2, product: "B", amount: 150 },
  { _id: 3, product: "A", amount: 200 },
  { _id: 4, product: "C", amount: 75 },
  { _id: 5, product: "B", amount: 120 }
]);
```

```
var mapFunction = function() {
  emit(this.product, this.amount);
};
```

```
var reduceFunction = function(key, values) {
  return Array.sum(values);
};
```

```
var outputCollection = "sales_total_by_product";

db.sales.mapReduce(
  mapFunction,
  reduceFunction,
  {
    out: outputCollection
  }
);
```

```
db[outputCollection].find();
```

Output:

```
{ "_id" : "A", "value" : 300 }  
{ "_id" : "B", "value" : 270 }  
{ "_id" : "C", "value" : 75 }
```