// Insert sample data into the SalesData collection

db.SalesData.insertMany([

{ "store": "Store A", "product": "Product 1", "quantity": 10, "price": 100 },

{ "store": "Store B", "product": "Product 1", "quantity": 5, "price": 100 },

{ "store": "Store A", "product": "Product 2", "quantity": 8, "price": 200 },

{ "store": "Store B", "product": "Product 2", "quantity": 3, "price": 200 }

]);

// Map function to emit key-value pairs where the key is the product and the value is the total revenue

var mapFunction = function() {

emit(this.product, this.quantity \* this.price);

};

// Reduce function to sum up the values for each product

var reduceFunction = function(key, values) {

return Array.sum(values);

};

// Perform the MapReduce operation

db.SalesData.mapReduce(

mapFunction,

reduceFunction,

{

out: "total\_revenue\_per\_product" // Output collection

}

);

// View the results in the output collection

db.total\_revenue\_per\_product.find().pretty();

\*\*\*\*\*\*\*\*\*\*\*

Calculate Total Quantity Sold per Store for Each Product

var mapFunctionQuantityPerStore = function() {

emit({ product: this.product, store: this.store }, this.quantity);

};

var reduceFunctionSumQuantities = function(key, values) {

return Array.sum(values);

};

db.SalesData.mapReduce(

mapFunctionQuantityPerStore,

reduceFunctionSumQuantities,

{

out: "total\_quantity\_per\_store"

}

);

db.total\_quantity\_per\_store.find().pretty();