20.Design a map-reduce operations on a collection “orders” that contains documents of the following prototype. Solve the following .

{

cust\_id: "abc123",

ord\_date: new Date("Oct 04, 2012"), status: 'A', price: 25, gender :’F’, rating: 1

}

1. a) Count the number of female (F) and male (M) respondents in the orders collection
2. Count the number of each type of rating (1, 2, 3, 4 or 5) for each orders

var mapFunction = function() { emit(this.gender, 1);

};

\*\*Reduce function:\*\*

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

};

\*\*Run the map-reduce operation:\*\*

```javascript var genderCount = db.orders.mapReduce( mapFunction, reduceFunction,

{ out: "genderCount" }

);

// Query the result

db.genderCount.find();

var mapFunction = function() { emit(this.rating, 1);

};

\*\*Reduce function:\*\*

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

};

\*\*Run the map-reduce operation:\*\*

```javascript var ratingCount = db.orders.mapReduce( mapFunction, reduceFunction,

{ out: "ratingCount" }

);

// Query the result

db.ratingCount.find();