MapReduce Code:

```
var map4 = function(){emit(this.Restaurant_Name,1);};

var red4 = function(id,cnt) {return Array.sum(cnt);};

db.abc.mapReduce(map4,red4,{out:"map_red_exam"})


var map5 = function(){emit(this.Has_Online_delivery,1);};

var red5 = function(id,cnt) {return Array.sum(cnt);};

db.abc.mapReduce(map5,red5,{out:"map_red_exam1"})


var map6 = function(){emit(this.Is_delivering_now,1);};

var red6 = function(id,cnt) {return Array.sum(cnt);};

db.abc.mapReduce(map6,red6,{out:"map_red_exam2"})


var map8 = function(){emit(this.Has_Table_boooking,1);};

var red8 = function(id,cnt) {return Array.sum(cnt);};

db.abc.mapReduce(map8,red8,{out:"map_red_exam4"})
```

Screenshots of MapReduce operation on MongoDB:

```
MongoDB Enterprise > use restaurant
switched to db restaurant
MongoDB Enterprise > db.abc.find().pretty()
{
        "_id" : ObjectId("60c8c22557a5069d05d973de"),
        "Restaurant ID" : 6317637,
        "Restaurant_Name" : "Le Petit Souffle",
        "Country_Code" : 162,
        "City" : "Makati City",
        "Address" : "Third Floor, Century City Mall, Kalayaan Avenue, Poblacion, Makati City",
        "Locality" : "Century City Mall, Poblacion, Makati City",
        "Locality_Verbose" : "Century City Mall, Poblacion, Makati City, Makati City",
        "Longitude" : 121.027535,
        "Latitude" : 14.565443,
        "Cuisines" : "French, Japanese, Desserts",
        "Average_Cost_for_two" : 1100,
        "Currency" : "Botswana Pula(P)",
        "Has_Table_booking" : "Yes",
        "Has_Online_delivery" : "No",
        "Is_delivering_now" : "No",
        "Switch_to_order_menu" : "No",
        "Price_range" : 3,
        "Aggregate_rating" : 4.8,
        "Rating_color" : "Dark Green",
        "Rating_text" : "Excellent",
        "Votes" : 314
}
Type "it" for more
MongoDB Enterprise > var map4 = function(){emit(this.Restaurant_Name,1);};
MongoDB Enterprise > var red4 = function(id,cnt) {return Array.sum(cnt);};
MongoDB Enterprise > db.abc.mapReduce(map4,red4,{out:"map_red_exam"})
{
        "result" : "map_red_exam",
        "timeMillis" : 1694,
        "counts" : {
                "input" : 9551,
                "emit" : 9551,
                "reduce" : 740,
                "output" : 7446
        },
        "ok" : 1
}
MongoDB Enterprise > db.map_red_exam.find().pretty()
{ "_id" : 12212, "value" : 1 }
{ "_id" : "#45", "value" : 1 }
{ "_id" : "#Dilliwaala6", "value" : 1 }
{ "_id" : "#InstaFreeze", "value" : 1 }
{ "_id" : "#OFF Campus", "value" : 1 }
{ "_id" : "#Urban Caf██", "value" : 1 }
{ "_id" : "#hashtag", "value" : 1 }
{ "_id" : "'Ohana", "value" : 1 }
{ "_id" : "10 Downing Street", "value" : 2 }
{ "_id" : "10 To 10 In Delhi", "value" : 1 }
{ "_id" : "11th Avenue Cafe Bistro", "value" : 1 }
{ "_id" : "13 Cafe", "value" : 1 }
{ "_id" : "145 Kala Ghoda", "value" : 1 }
{ "_id" : "17 Degree Food Service", "value" : 1 }
{ "_id" : "17 Degrees", "value" : 1 }
{ "_id" : "18 Degrees Resto Lounge", "value" : 1 }
{ "_id" : "19 Flavours Biryani", "value" : 1 }
{ "_id" : "1911 - The Imperial", "value" : 1 }
{ "_id" : "1911 Bar - The Imperial", "value" : 1 }
{ "_id" : "1918 Bistro & Grill", "value" : 1 }
Type "it" for more

C:\Users\PRATHMESHPATIL\mongodb-win32-x86_64-enterprise-windows-64-4.2.13\bin>mongoexport --db restaurant --collection map_red_exam --out G:\pdb\storecount.csv
2021-06-15T20:46:20.110+0530    connected to: mongodb://localhost/
2021-06-15T20:46:20.388+0530    exported 7446 records
```

```
MongoDB Enterprise > use restaurant
switched to db restaurant
MongoDB Enterprise > var map5 = function(){emit(this.Has_Online_delivery,1);};
MongoDB Enterprise > var red5 = function(id,cnt) {return Array.sum(cnt);};
MongoDB Enterprise > db.abc.mapReduce(map5,red5,{out:"map_red_exam1"})
{
        "result" : "map_red_exam1",
        "timeMillis" : 703,
        "counts" : {
                "input" : 9551,
                "emit" : 9551,
                "reduce" : 183,
                "output" : 2
        },
        "ok" : 1
}
MongoDB Enterprise > db.map_red_exam1.find().pretty()
{ "_id" : "No", "value" : 7100 }
{ "_id" : "Yes", "value" : 2451 }
MongoDB Enterprise > db.map_red_exam1.find()
{ "_id" : "No", "value" : 7100 }
{ "_id" : "Yes", "value" : 2451 }
MongoDB Enterprise > var map6 = function(){emit(this.Is_delivering_now,1);};
MongoDB Enterprise > var red6 = function(id,cnt) {return Array.sum(cnt);};
MongoDB Enterprise > db.abc.mapReduce(map6,red6,{out:"map_red_exam2"})
{
        "result" : "map_red_exam2",
        "timeMillis" : 502,
        "counts" : {
                "input" : 9551,
                "emit" : 9551,
                "reduce" : 108,
                "output" : 2
        },
        "ok" : 1
}
MongoDB Enterprise >
MongoDB Enterprise > db.map_red_exam2.find().pretty()
{ "_id" : "No", "value" : 9517 }
{ "_id" : "Yes", "value" : 34 }
MongoDB Enterprise > var map7 = function(){emit(this.Has_Online_delivery,1);};
MongoDB Enterprise > var red7 = function(id,cnt) {return Array.sum(cnt);};
MongoDB Enterprise > db.abc.mapReduce(map7,red7,{out:"map_red_exam3"})
{
        "result" : "map_red_exam3",
        "timeMillis" : 722,
        "counts" : {
                "input" : 9551,
                "emit" : 9551,
                "reduce" : 183,
                "output" : 2
        },
        "ok" : 1
}
MongoDB Enterprise > db.map_red_exam3.find().pretty()
{ "_id" : "No", "value" : 7100 }
{ "_id" : "Yes", "value" : 2451 }
MongoDB Enterprise > exit
bye
```

```
C:\Users\PRATHMESHPATIL\mongodb-win32-x86_64-enterprise-windows-64-4.2.13\bin>mongoexport --db restaurant --collection map_red_exam1 --out G:\pdb\hasonlinedelivery.csv
2021-06-15T21:00:16.258+0530    connected to: mongodb://localhost/
2021-06-15T21:00:16.276+0530    exported 2 records

C:\Users\PRATHMESHPATIL\mongodb-win32-x86_64-enterprise-windows-64-4.2.13\bin>mongoexport --db restaurant --collection map_red_exam1 --out G:\pdb\isdeliveringnow.csv
2021-06-15T21:00:35.814+0530    connected to: mongodb://localhost/
2021-06-15T21:00:35.829+0530    exported 2 records

C:\Users\PRATHMESHPATIL\mongodb-win32-x86_64-enterprise-windows-64-4.2.13\bin>mongoexport --db restaurant --collection map_red_exam1 --out G:\pdb\hasonlinedelivery.csv
2021-06-15T21:01:05.325+0530    connected to: mongodb://localhost/
2021-06-15T21:01:05.343+0530    exported 2 records

C:\Users\PRATHMESHPATIL\mongodb-win32-x86_64-enterprise-windows-64-4.2.13\bin>mongoexport --db restaurant --collection map_red_exam2 --out G:\pdb\isdeliveringnow.csv
2021-06-15T21:01:14.231+0530    connected to: mongodb://localhost/
2021-06-15T21:01:14.249+0530    exported 2 records
MongoDB Enterprise > use restaurant
switched to db restaurant
MongoDB Enterprise > var map8 = function(){emit(this.Has_Table_boooking,1);};
MongoDB Enterprise > var red8 = function(id,cnt) {return Array.sum(cnt);};
MongoDB Enterprise > db.abc.mapReduce(map8,red8,{out:"map_red_exam4"})
{
        "result" : "map_red_exam4",
        "timeMillis" : 496,
        "counts" : {
                "input" : 9551,
                "emit" : 9551,
                "reduce" : 97,
                "output" : 1
        },
        "ok" : 1
}
MongoDB Enterprise > db.map_red_exam4.find().pretty()
{ "_id" : null, "value" : 9551 }
MongoDB Enterprise > var map8 = function(){emit(this.Has_Table_booking,1);};
MongoDB Enterprise > var red8 = function(id,cnt) {return Array.sum(cnt);};
MongoDB Enterprise > db.abc.mapReduce(map8,red8,{out:"map_red_exam4"})
{
        "result" : "map_red_exam4",
        "timeMillis" : 638,
        "counts" : {
                "input" : 9551,
                "emit" : 9551,
                "reduce" : 187,
                "output" : 2
        },
        "ok" : 1
}
MongoDB Enterprise > db.map_red_exam4.find().pretty()
{ "_id" : "No", "value" : 8393 }
{ "_id" : "Yes", "value" : 1158 }
MongoDB Enterprise > exit
bye

C:\Users\PRATHMESHPATIL\mongodb-win32-x86_64-enterprise-windows-64-4.2.13\bin>mongoexport --db restaurant --collection map_red_exam4 --out G:\pdb\hastablebooking.csv
2021-06-15T21:05:21.573+0530    connected to: mongodb://localhost/
2021-06-15T21:05:21.589+0530    exported 2 records
```