

**Name: Sanskruti Patil**

**Roll No. : 31448**

```
db.textdata.insertMany([
  {_id: 1, content:"database systems are powerful"},
  {_id: 2, content:"Mongodb is nosql language"},
  {_id: 3, content:"nosql systems are scalable"}
])

// ("database", 1)
// ("systems", 1)
// ("are", 1)
// ("powerful", 1)
// store key value pair
mapFunction = function(){
  var words = this.content.split(" ");
  for(var i=0;i<words.length;i++){
    emit(words[i],1);
  }
};

// If "systems" appeared twice, MongoDB would call:
// reduceFunction("systems", [1, 1]) → returns 2
reduceFunction = function(key,values){
  return Array.sum(values);
};

db.textdata.mapReduce(mapFunction,reduceFunction,{out:"word_count_result"});

// output
{ "acknowledged" : true, "insertedIds" : [ 1, 2, 3 ] }
function(){
  var words = this.content.split(" ");
  for(var i=0;i<words.length;i++){
    emit(words[i],1);
  }
}
function(key,values){
  return Array.sum(values);
}

db.word_count_result.find().pretty()
//output
{ "result" : "word_count_result", "ok" : 1 }
{ "_id" : "nosql", "value" : 1 }
{ "_id" : "systems", "value" : 2 }
```

```
{ "_id" : "are", "value" : 2 }  
{ "_id" : "database", "value" : 1 }  
{ "_id" : "powerful", "value" : 1 }  
{ "_id" : "Mongodb", "value" : 1 }  
{ "_id" : "is", "value" : 1 }  
{ "_id" : "language", "value" : 1 }  
{ "_id" : "nonsql", "value" : 1 }  
{ "_id" : "scalable", "value" : 1 }
```