

simple-map.json

A simple map-only job that returns the entire data set.

```
{ "inputs": "goog",
  "query": [{ "map": { "language": "javascript",
                      "name": "Riak.mapValuesJson",
                      "keep": true } } ]
}
```

map-high.json

A map-reduce job that returns the maximum high sell value in the first week of January.

```
{ "inputs": [ [ "goog", "2010-01-04" ],
              [ "goog", "2010-01-05" ],
              [ "goog", "2010-01-06" ],
              [ "goog", "2010-01-07" ],
              [ "goog", "2010-01-08" ] ],
  "query": [ { "map": { "language": "javascript",
                      "source": "function(value, keyData, arg) { var data =
Riak.mapValuesJson(value)[0]; return [data.High]; }"
                      } },
              { "reduce": { "language": "javascript", "name": "Riak.reduceMax", "keep": true } } ]
}
```

map-highs-by-month.json

A more complicated map-reduce job that collects the max high by month.

```
{
  "inputs": "goog",
  "query": [
    { "map": { "language": "javascript", "source": "function(value, keyData, arg) { var
data = Riak.mapValuesJson(value)[0]; var month = value.key.split('-
').slice(0,2).join('-'); var obj = {}; obj[month] = data.High; return [obj]; }" },
    { "reduce": { "language": "javascript", "source": "function(values, arg) { return [
values.reduce(function(acc, item) { for(var month in item) { if(acc[month]) { acc[month]
= (acc[month] < item[month]) ? item[month] : acc[month]; } else { acc[month] =
item[month]; } } return acc; } ) ]; }" }, "keep": true } } ]
}
```

first-week.json

A simple map-only job that returns the values for the first week of January 2010.

```
{ "inputs": [ [ "goog", "2010-01-04" ],
              [ "goog", "2010-01-05" ],
              [ "goog", "2010-01-06" ],
              [ "goog", "2010-01-07" ],
              [ "goog", "2010-01-08" ] ],
  "query": [ { "map": { "language": "javascript", "name": "Riak.mapValuesJson", "keep": true } } ]
}
```

Map: find the days where the high was over \$600.00

Phase Function

```
function(value, keyData, arg) {  
  var data = Riak.mapValuesJson(value)[0];  
  if(data.High && data.High > 600.00)  
    return [value.key];  
  else  
    return [];  
}
```

Complete Job

```
{ "inputs": "goog",  
  "query": [ { "map": { "language": "javascript",  
                        "source": "function(value, keyData, arg) { var data =  
Riak.mapValuesJson(value)[0]; if(data.High && parseFloat(data.High) > 600.00)  
return [value.key]; else return [];}",  
                        "keep": true } } ]  
}
```

Map: find the days where the close is lower than open

Phase Function

```
function(value, keyData, arg) {  
  var data = Riak.mapValuesJson(value)[0];  
  if(data.Close < data.Open)  
    return [value.key];  
  else  
    return [];  
}
```

Complete Job

```
{ "inputs": "goog",  
  "query": [ { "map": { "language": "javascript",  
                        "source": "function(value, keyData, arg) { var data =  
Riak.mapValuesJson(value)[0]; if(data.Close < data.Open) return [value.key]; else  
return [];}",  
                        "keep": true } } ]  
}
```

Map and Reduce: find the maximum daily variance in price by month

Phase functions

```
/* Map function to compute the daily variance and key it by the month */
function(value, keyData, arg){
    var data = Riak.mapValuesJson(value)[0];
    var month = value.key.split('-').slice(0,2).join('-');
    var obj = {};
    obj[month] = data.High - data.Low;
    return [ obj ];
}

/* Reduce function to find the maximum variance per month */
function(values, arg){
    return [ values.reduce(function(acc, item){
        for(var month in item){
            if(acc[month]) { acc[month] = (acc[month] < item[month]) ?
item[month] : acc[month]; }
            else { acc[month] = item[month]; }
        }
        return acc;
    })
    ];
}
```

Complete Job

```
{ "inputs": "goog",
  "query": [ { "map": { "language": "javascript",
    "source": "function(value, keyData, arg){ var data =
Riak.mapValuesJson(value)[0]; var month = value.key.split('-').slice(0,2).join('-'); var obj = {}; obj[month] = data.High - data.Low; return [ obj ];}" },
    { "reduce": { "language": "javascript",
      "source": "function(values, arg){ return [
values.reduce(function(acc, item){ for(var month in item){ if(acc[month]) {
acc[month] = (acc[month] < item[month]) ? item[month] : acc[month]; } else {
acc[month] = item[month]; } } return acc; }) ];}" },
      "keep": true } }
    ]
}
```