FUTURE SPARK

MONGODB PROJECT

Volcanoes of earth

And

H and M

MONGODB PROJECT

Volcanoes of earth

OUTLINE:

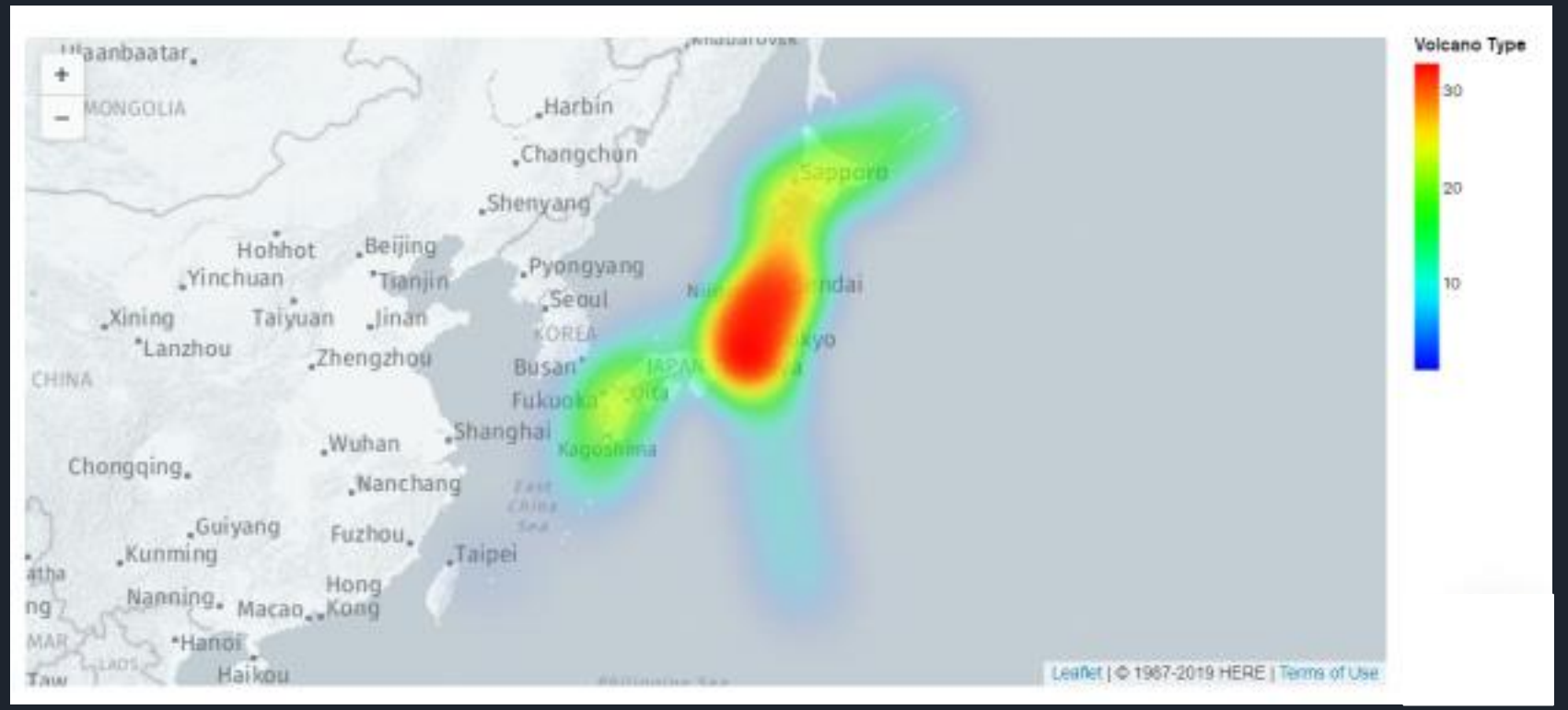
- Dashboard
- Pipelines

DASHBOARD

Volcanoes of earth

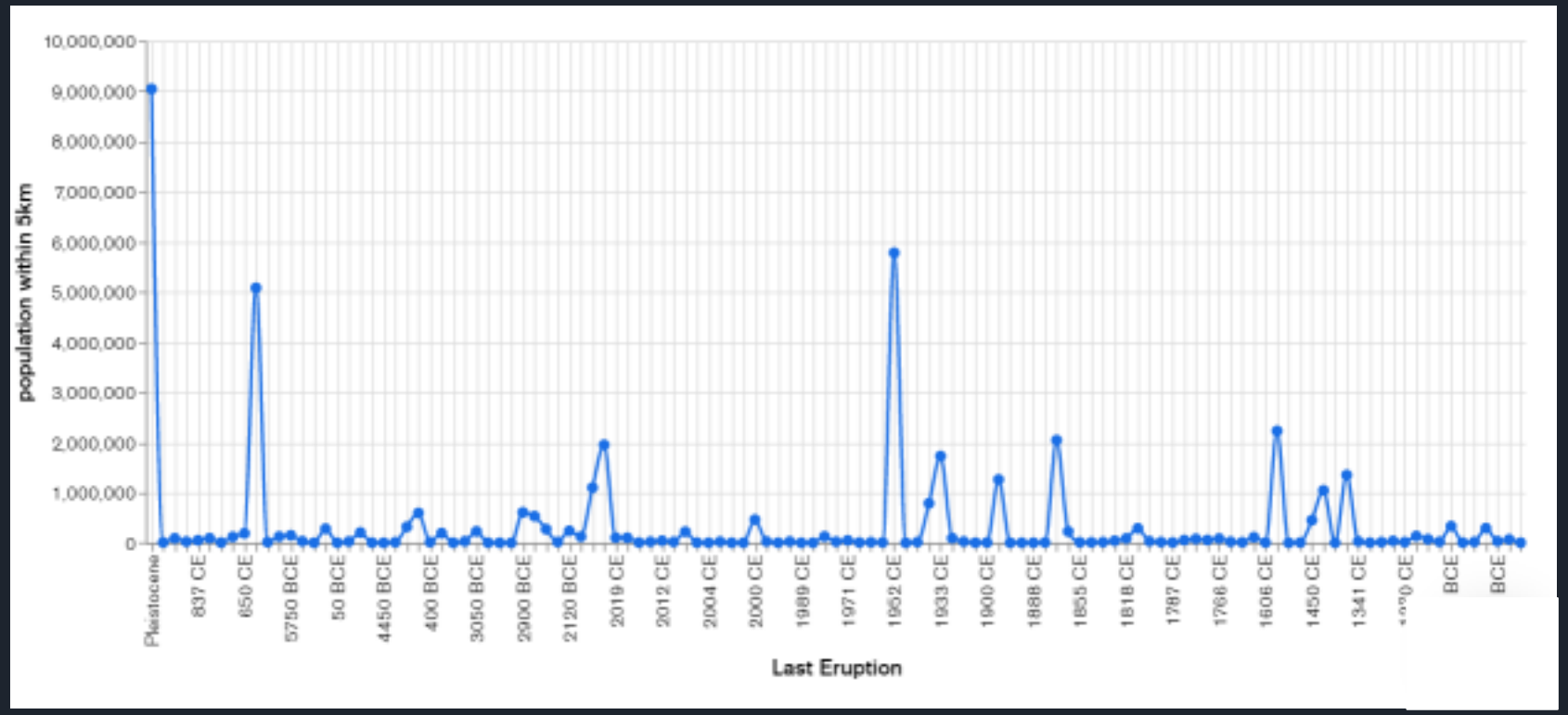
All volcanoes that located in Japan

The geospatial of Japan shows the area that had the high number of volcano. The area that colored in orange had the high number of volcano than other.



All volcanoes where population within 5 km more than 5 thousand people

The line chart shows the timeline frame of population within 5km and last eruption

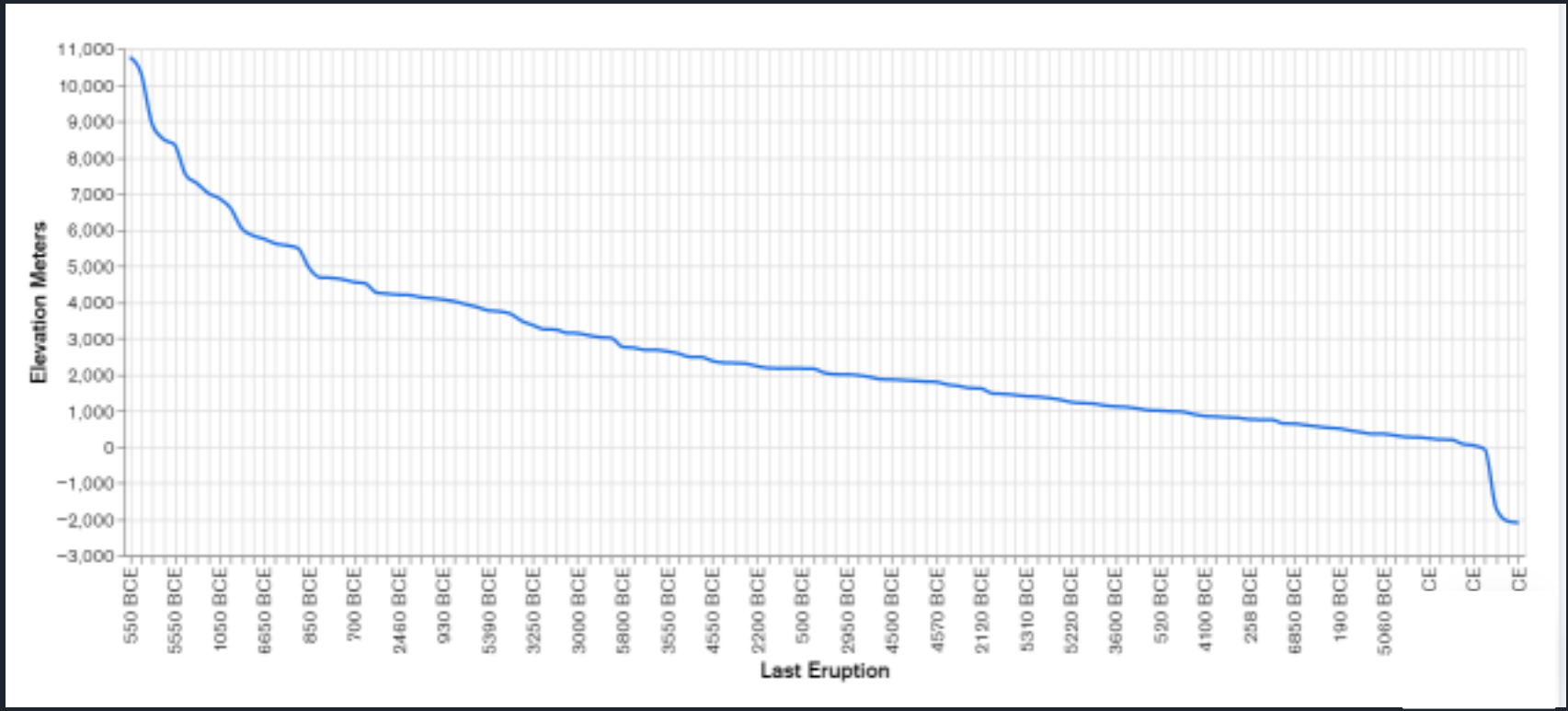


All volcanoes per country per volcano type where the population is more than 100,000 people within 10km

The word cloud shows the country that had high number of volcanoes and volcano type. regard to our data set we can notice that Indonesia has highest number of volcanoes and 25 volcano type.

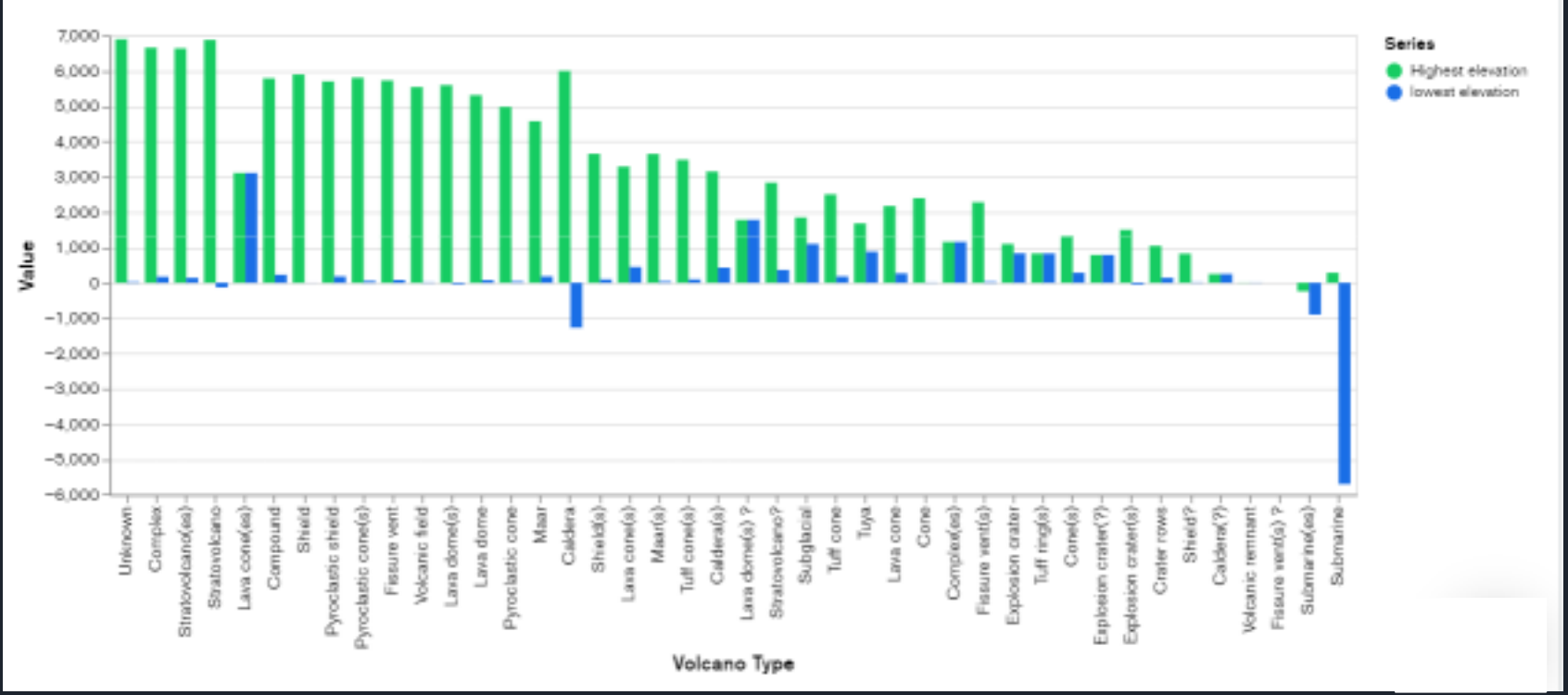
All volcanoes that erupted before the common era (BCE)

The line chart shows that are eruption sort by the elevation from the highest to the lowest and some eruption happened under the water (negative value).



The highest and lowest elevation by volcano types

The chart shows the highest (green column) and lowest (blue column) elevation for each volcano type . we conclusion that negative value mean the volcano happened under the water.

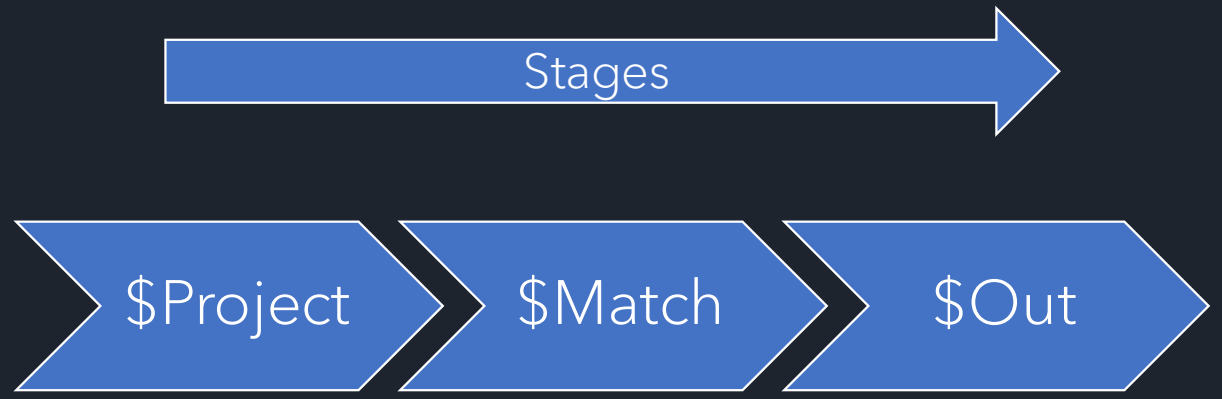


PIPELINES

Volcanoes of earth

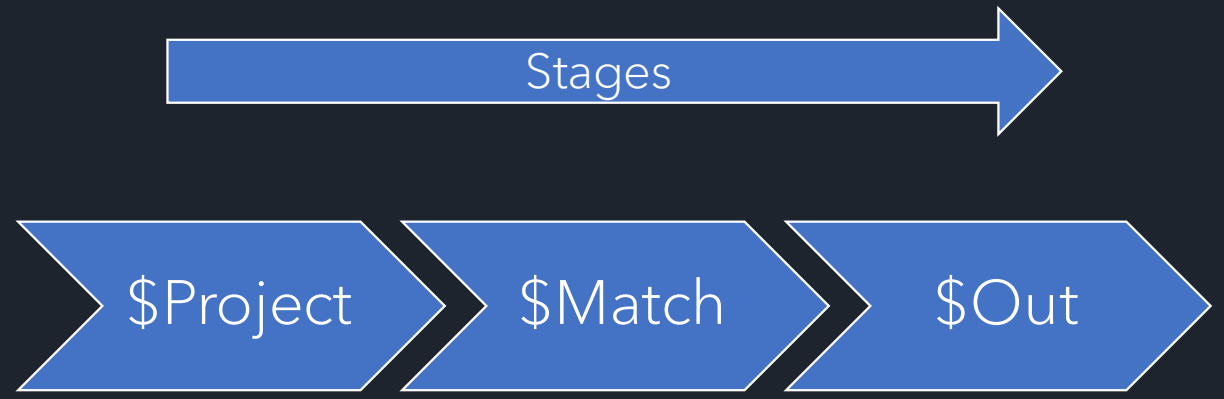
PIPELINES ALL VOLCANOES IN JAPAN

```
[{ $project: {  _id: 0,
Country: 1,
Volcano_Name: 1,
Volcano_Type: 1,
Last_Eruption: 1,  Lat: 1,
Lon: 1,  location: {   type:
'Point',   coordinates: [
'$Lon',    '$Lat'   ]  } }},

 { $match: {  Country:
'Japan' }},

{ $out:
'All_volcanoes_in_japan'
}]
```



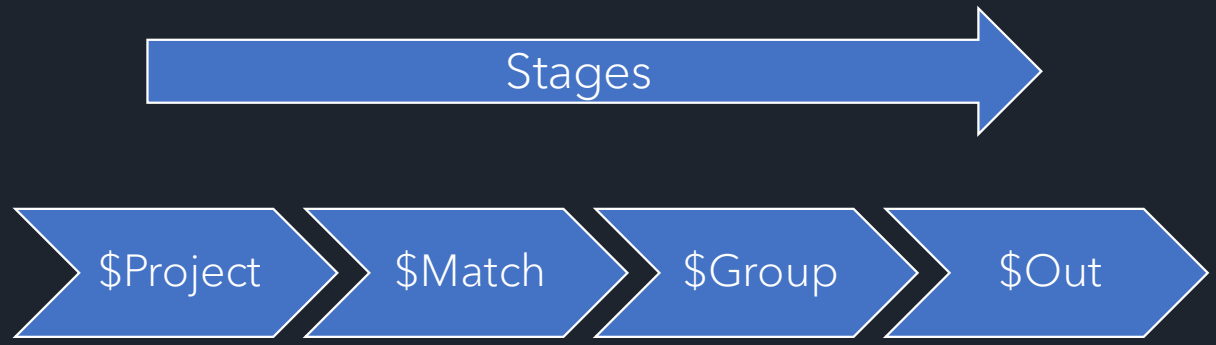
PIPELINE ALL VOLCANOES WHERE POP WITHIN 5KM MORE THAN 5000 PEOPLE

```
[{ $project:{  _id: 0,
Volcano_Name: 1,
Volcano_Type: 1,
Country: 1,
Last_Eruption: 1,  Lat: 1,
Lon: 1,
population_within_5km:
1 }},
{ $match: {
population_within_5km:
{   $gt: 5000  } }},
 { $out:
'Pipeline_All_volcanoes_
where_pop_within_5KM
_more_than_5000Pepole
'}]
```



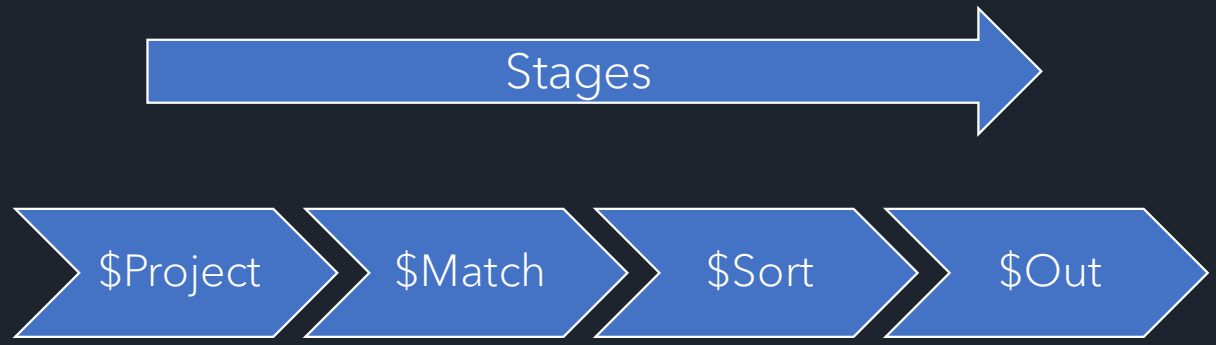
PIPELINE ALL VOLCANOES PER COUNTRY PER VOLCANO TYPE WITHIN10KM MORE THAN100000 PEOPLE

```
[{ $project:{  _id: 0,
Country: 1,
Volcano_Type: 1,
population_within_10km
: 1 }},
 { $match: {
population_within_10km
:{   $gt: 100000  } }},
 { $group:{  _id:
'$Country',  Vol_type:{
$push: '$Volcano_Type'
} }}, { $out:
'Pipeline_All_volcanoes_
per_country_per_volcan
o_type_within10km_mor
e_than_100000Pepole_u
pdate'}]
```



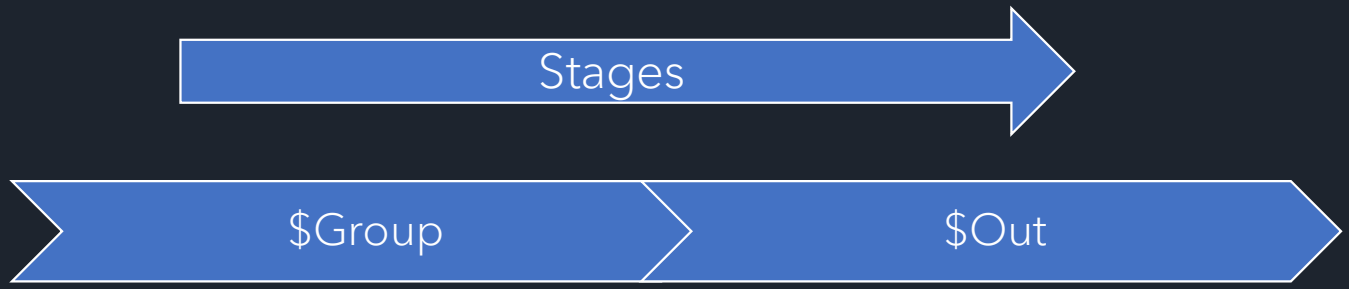
PIPELINE VOLCANOES THAT ERUPTED BCE

```
[{ $project: {  _id: 0,
Volcano_Name: 1,
elevation_meters: 1,
Last_Eruption: 1,
Location: {   $concat: [
'$Country',    '-',
'$Latitude',
'$Longitude'   ]  } }}, {
$match: {  Last_Eruption:
{   $regex: 'BCE'  } }}, {
$sort: {
elevation_meters: -1 }}, {
$out:
'Pipeline_Volcanoes_that
_erupted_BCE'}]
```



PIPELINE VOLCANOES WITH THE HIGHEST AND LOWEST ELEVATION BY VOLCANO TYPES

```
[{ $group:{ _id:
'$Volcano_Type',
lowest_elevation:{
$min:
'$elevation_meters' },
Highest_elevation:{
$max:
'$elevation_meters' }}},{
$out:
'Pipeline_Highest_Lowes
t_Vol'}]
```



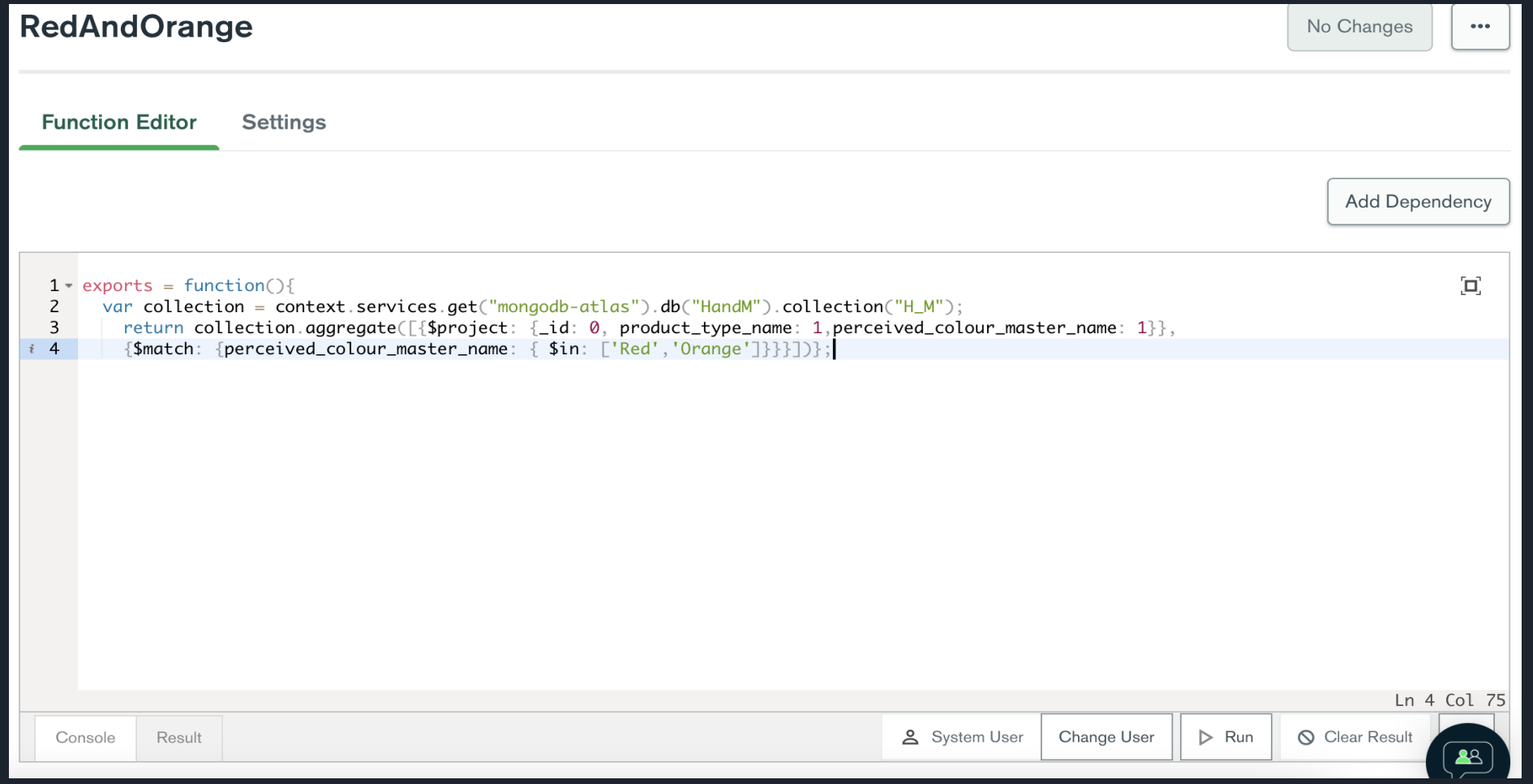
MONGODB PROJECT

H and M

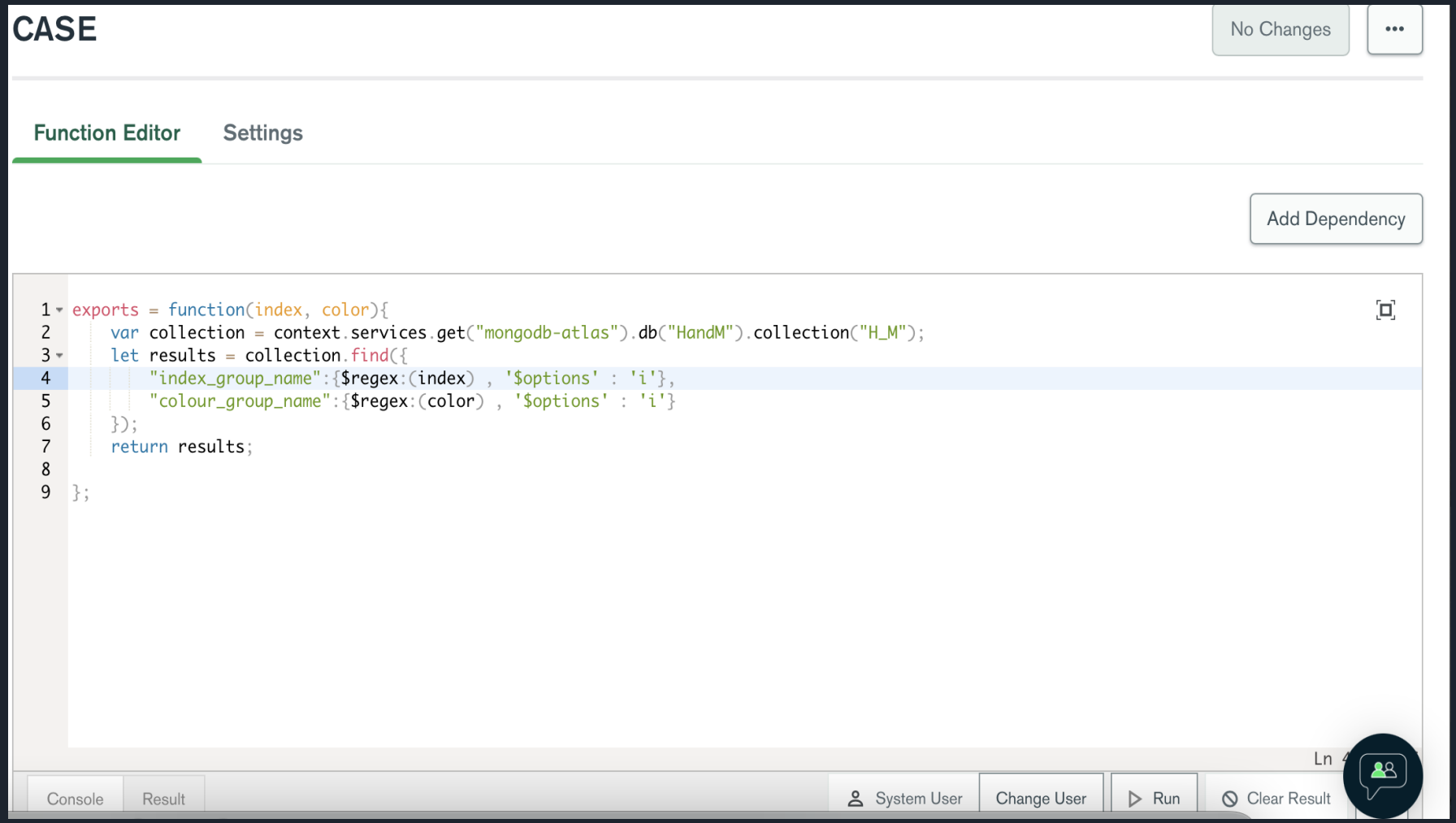
OUTLINE:

- Function

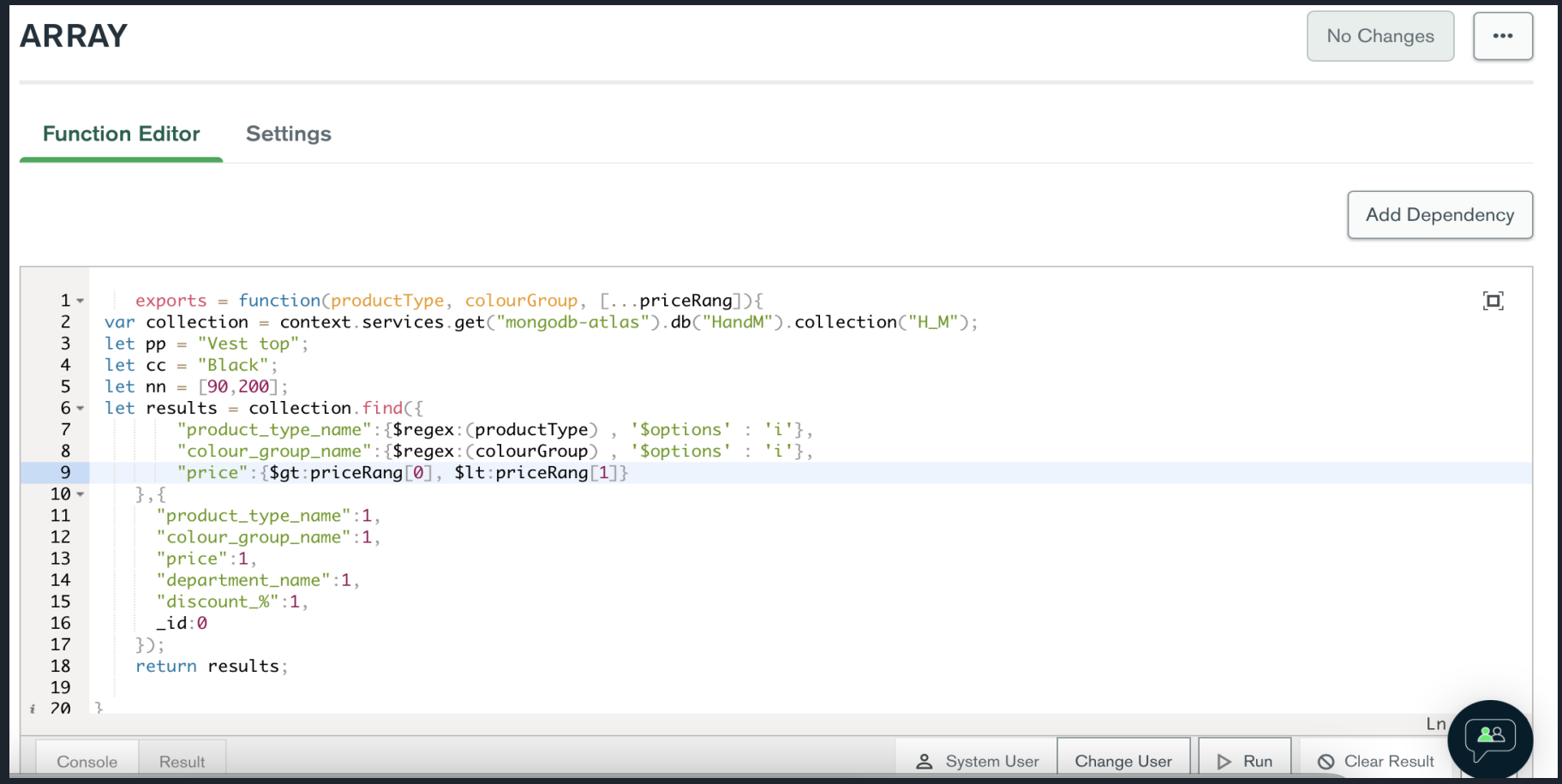
FUNCTION1


RedAndOrange
No Changes
Function Editor
Settings
Add Dependency
exports = function(){
var collection = context.services.get("mongodb-atlas").db("HandM").collection("H_M");
return collection.aggregate([{$project: {_id: 0, product_type_name: 1,perceived_colour_master_name: 1}},
{$match: {perceived_colour_master_name: { $in: ['Red','Orange']}}}])};
Ln 4 Col 75
Console
Result
System User
Change User
Run
Clear Result

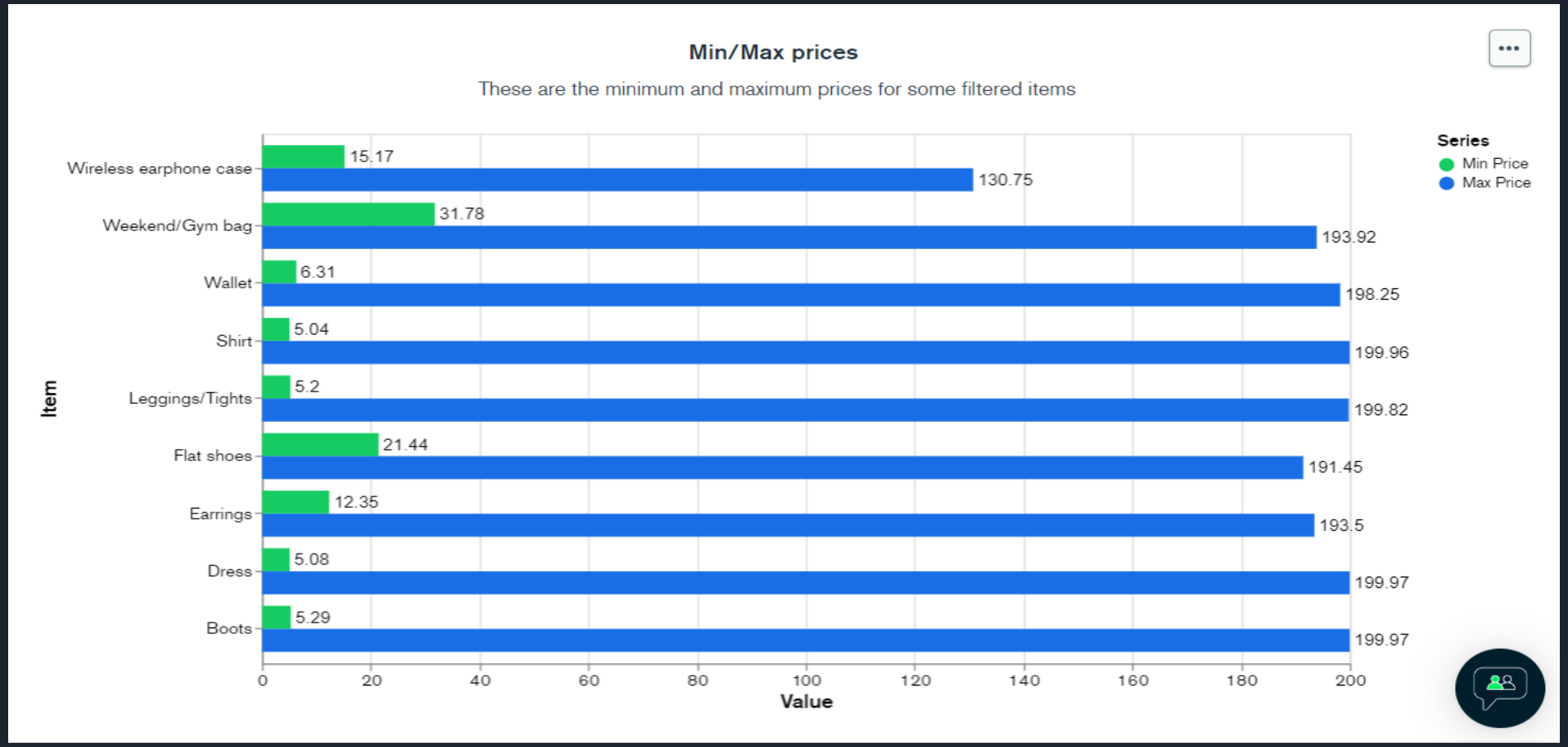
FUNCTION2


CASE
No Changes
Function Editor
Settings
Add Dependency
exports = function(index, color){
var collection = context.services.get("mongodb-atlas").db("HandM").collection("H_M");
let results = collection.find({
"index_group_name":{$regex:(index) , '$options' : 'i'},
"colour_group_name":{$regex:(color) , '$options' : 'i'}
});
return results;
};
Console
Result
System User
Change User
Run
Clear Result

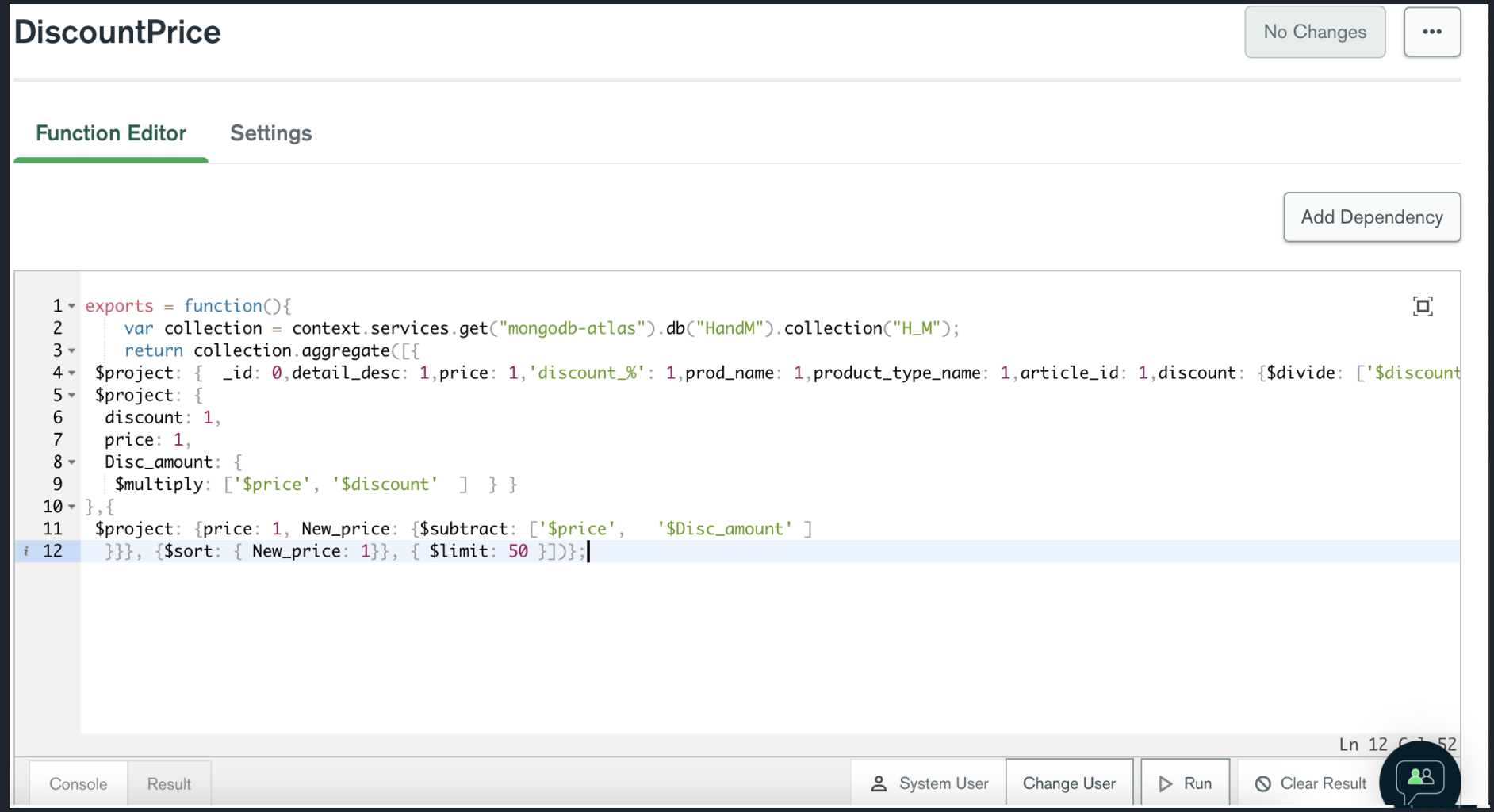
FUNCTION3


ARRAY
No Changes
Function Editor
Settings
Add Dependency
exports = function(productType, colourGroup, [...priceRang]){
var collection = context.services.get("mongodb-atlas").db("HandM").collection("H_M");
let pp = "Vest top";
let cc = "Black";
let nn = [90,200];
let results = collection.find({
"product_type_name":{$regex:(productType) , '$options' : 'i'},
"colour_group_name":{$regex:(colourGroup) , '$options' : 'i'},
"price":{$gt:priceRang[0], $lt:priceRang[1]}
},{
"product_type_name":1,
"colour_group_name":1,
"price":1,
"department_name":1,
"discount_%":1,
_id:0
});
return results;
}
Ln
Console
Result
System User
Change User
Run
Clear Result

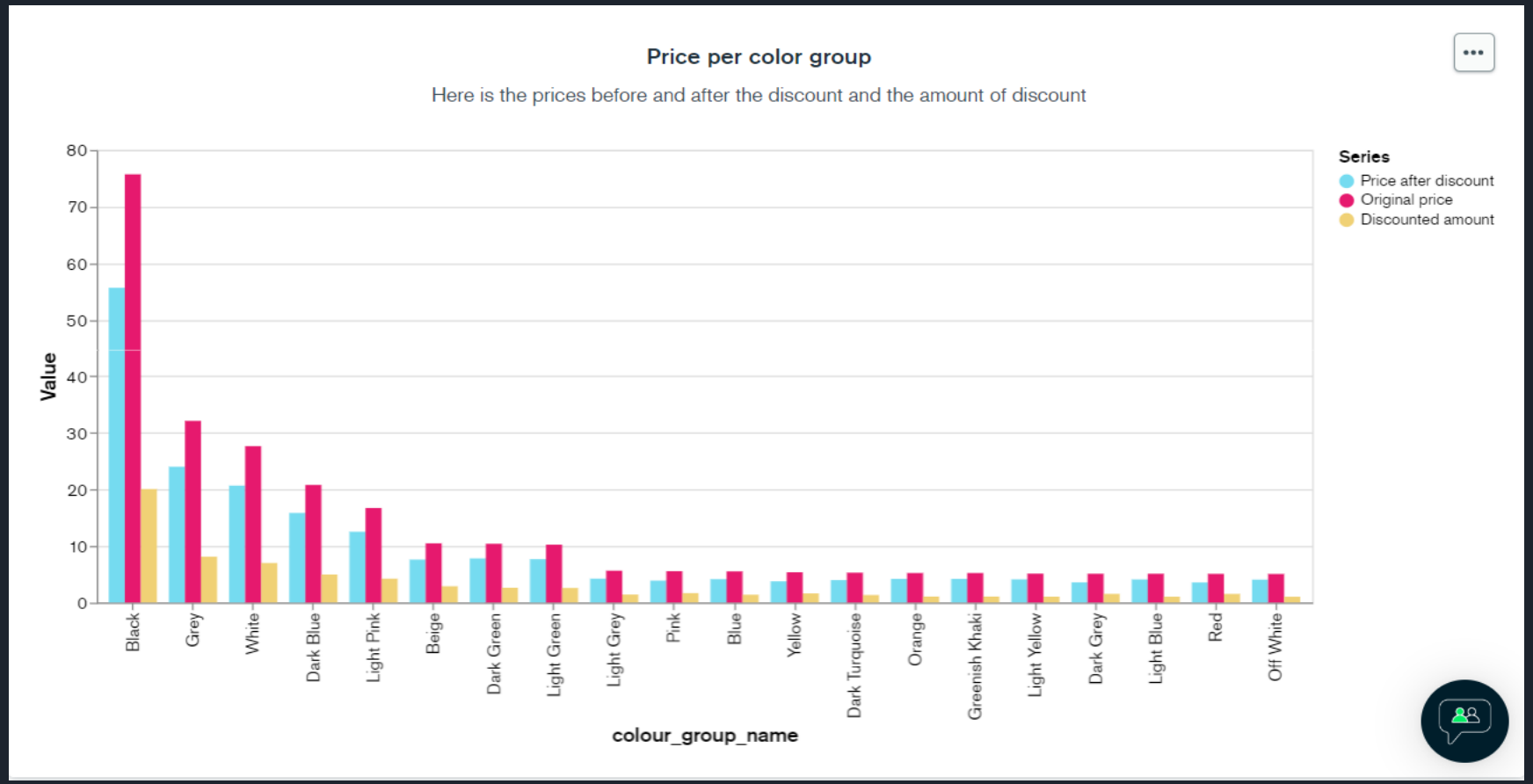
FUNCTION3


Min/Max prices
These are the minimum and maximum prices for some filtered items
Series
Min Price
Max Price
Item
Value
Wireless earphone case
15.17
130.75
Weekend/Gym bag
31.78
193.92
Wallet
6.31
198.25
Shirt
5.04
199.96
Leggings/Tights
5.2
199.82
Flat shoes
21.44
191.45
Earrings
12.35
193.5
Dress
5.08
199.97
Boots
5.29
199.97
0
20
40
60
80
100
120
140
160
180
200

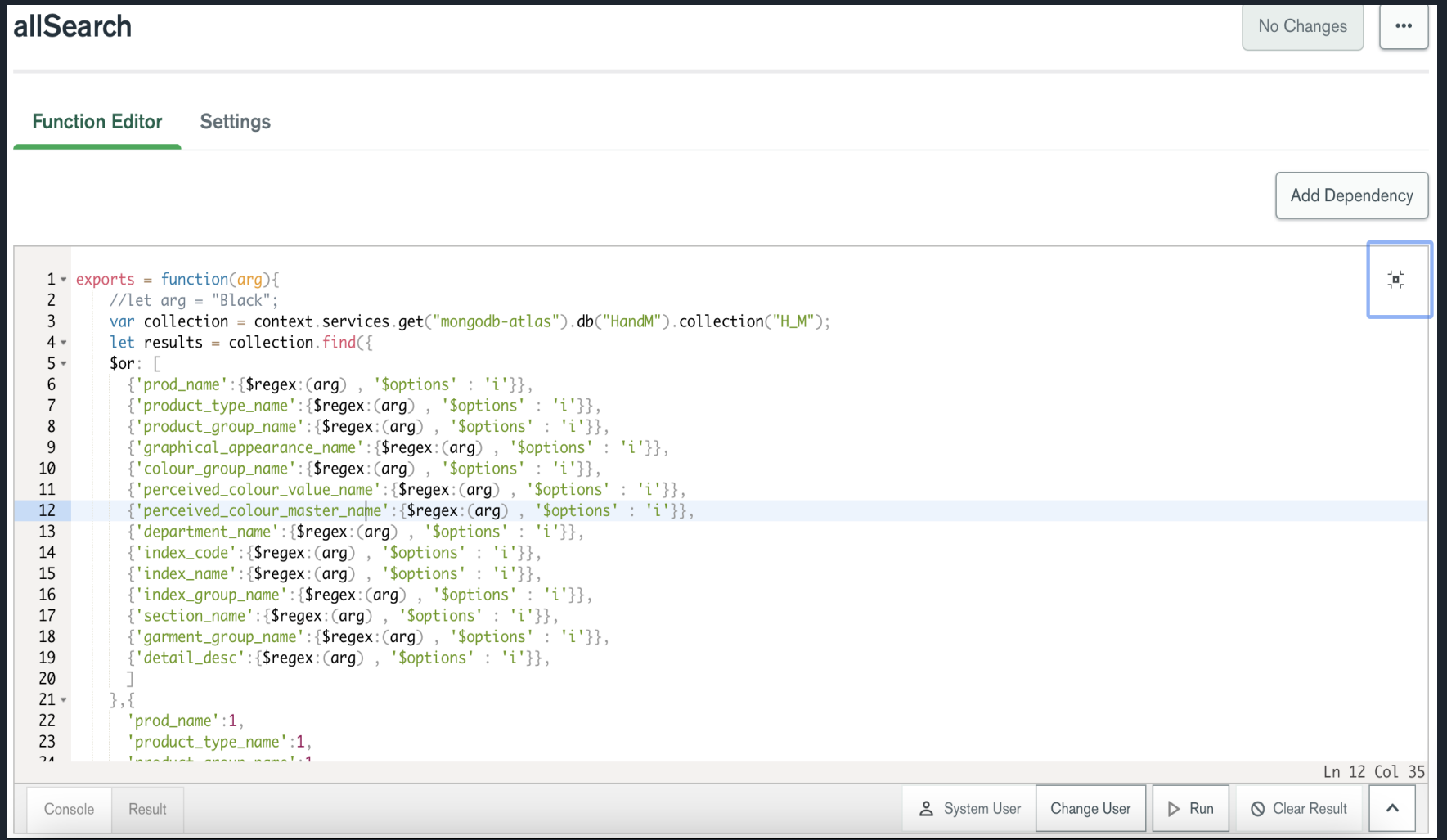
FUNCTION4


DiscountPrice
No Changes
Function Editor
Settings
Add Dependency
exports = function(){
var collection = context.services.get("mongodb-atlas").db("HandM").collection("H_M");
return collection.aggregate([{
$project: { _id: 0,detail_desc: 1,price: 1,'discount_%': 1,prod_name: 1,product_type_name: 1,article_id: 1,discount: {$divide: ['$discount
$project: {
discount: 1,
price: 1,
Disc_amount: {
$multiply: ['$price', '$discount'] } }
},{
$project: {price: 1, New_price: {$subtract: ['$price', '$Disc_amount']
}}}, {$sort: { New_price: 1}}, { $limit: 50 }])};
Ln 12
52
Console
Result
System User
Change User
Run
Clear Result

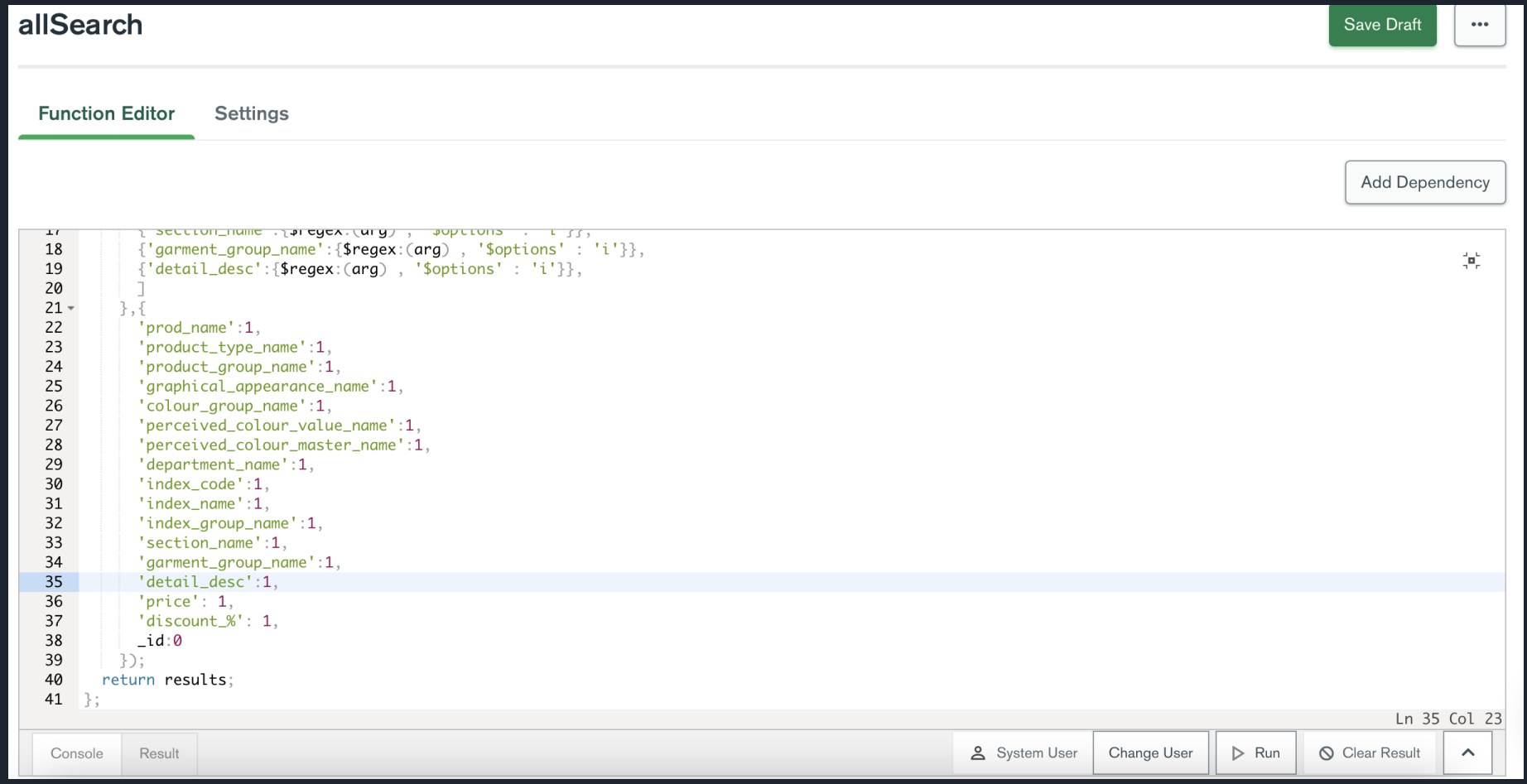
FUNCTION4


Price per color group
Here is the prices before and after the discount and the amount of discount
Series
Price after discount
Original price
Discounted amount
Value
80
70
60
50
40
30
20
10
0
Black
Grey
White
Dark Blue
Light Pink
Beige
Dark Green
Light Green
Light Grey
Pink
Blue
Yellow
Dark Turquoise
Orange
Greenish Khaki
Light Yellow
Dark Grey
Light Blue
Red
Off White
colour_group_name

FUNCTION5


allSearch
No Changes
Function Editor
Settings
Add Dependency
exports = function(arg){
//let arg = "Black";
var collection = context.services.get("mongodb-atlas").db("HandM").collection("H_M");
let results = collection.find({
$or: [
{'prod_name':{$regex:(arg) , '$options' : 'i'}},
{'product_type_name':{$regex:(arg) , '$options' : 'i'}},
{'product_group_name':{$regex:(arg) , '$options' : 'i'}},
{'graphical_appearance_name':{$regex:(arg) , '$options' : 'i'}},
{'colour_group_name':{$regex:(arg) , '$options' : 'i'}},
{'perceived_colour_value_name':{$regex:(arg) , '$options' : 'i'}},
{'perceived_colour_master_name':{$regex:(arg) , '$options' : 'i'}},
{'department_name':{$regex:(arg) , '$options' : 'i'}},
{'index_code':{$regex:(arg) , '$options' : 'i'}},
{'index_name':{$regex:(arg) , '$options' : 'i'}},
{'index_group_name':{$regex:(arg) , '$options' : 'i'}},
{'section_name':{$regex:(arg) , '$options' : 'i'}},
{'garment_group_name':{$regex:(arg) , '$options' : 'i'}},
{'detail_desc':{$regex:(arg) , '$options' : 'i'}},
]
},{
'prod_name':1,
'product_type_name':1,
Ln 12 Col 35
Console
Result
System User
Change User
Run
Clear Result

FUNCTION5


allSearch
Save Draft
Function Editor
Settings
Add Dependency
{'garment_group_name':{$regex:(arg) , '$options' : 'i'}},
{'detail_desc':{$regex:(arg) , '$options' : 'i'}},
},{
'prod_name':1,
'product_type_name':1,
'product_group_name':1,
'graphical_appearance_name':1,
'colour_group_name':1,
'perceived_colour_value_name':1,
'perceived_colour_master_name':1,
'department_name':1,
'index_code':1,
'index_name':1,
'index_group_name':1,
'section_name':1,
'garment_group_name':1,
'detail_desc':1,
'price': 1,
'discount_%': 1,
_id:0
});
return results;
};
Ln 35 Col 23
Console
Result
System User
Change User
Run
Clear Result

THANK YOU

Future Spark Team