

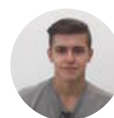


3. domaća zadaća iz NMBP-a (3rd homework Advanced Databases) (MR)

1(</>)

2(</>)

3(</>)



Luka Ilić
li51404@fer.hr
0036514047

3 days
02:09:19

[Submit](#)

Koristeći kolekciju `dvdrent` izračunajte prosječan iznos plaćanja najma u 2016 godini i koliko je postotno različit od prosjeka svih prethodnih godina zajedno. Prosjek zaokružiti na 4 decimale, a postotnu razliku na dvije i formatirati na dvije.

Nazivi atributa i format se vide iz primjera rezultata:

```
[
  {
    "_id": {
      "year": 2016
    },
    "value": {
      "avg": 4.1234,
      "diff": "-1.20%"
    }
  }
]
```

Using the `dvdrent` collection calculate the average amount of rent payment in 2016 and difference in percentages from the average of all the previous years together. Round the average to 4 decimal places, and the percentage difference to 2 decimal places (also format to two places).

Attribute names and the overall result format can be seen from the example: (see above).

```
1 db.dvdrent.mapReduce(
2   `function() {
3     var key = {year: 2016}
4     if (new Date(this.payment.payment_date).getFullYear() == 2016) {
5       var value = {count2016: 1, payment2016: this.payment.amount, count0: 0, payment0:
6     }
7     } else if(new Date(this.payment.payment_date).getFullYear() < 2016){
8       var value = {count2016: 0, payment2016: 0, count0: 1, payment0:
9     this.payment.amount}
10    } else {
11      var value = {count2016: 0, payment2016: 0, count0: 0, payment0: 0}
12    }
13    emit (key, value)
14  };`,
15  `function(key, values) {
16    var rv = {
17      count2016: 0,
18      payment2016: 0,
19      count0: 0,
20      payment0: 0
21    }
22  }`
23 )
```

[Run](#)[Save](#)

```
--
20     values.forEach(function(value) {
21         rv.count2016 += value.count2016
22         rv.payment2016 += value.payment2016
23         rv.count0 += value.count0
24         rv.payment0 += value.payment0
25     })
26     return rv
27 };`,
28 {
29     out: "videoteka2",
30     query: {"payment.payment_date": {$not: {$eq: null}}},
31     finalize: `function(key, rv) {
32         var newRv = {}
33         var avg2016 = rv.payment2016/rv.count2016
34         var avg0 = rv.payment0/rv.count0
35         newRv.avg = parseFloat(avg2016).toFixed(4)
36         var differ = ((avg2016-avg0)/avg0)*100
37         newRv.diff = differ.toFixed(2) + "%"
38         return newRv
39     }`
40 }
41 )
42
43
44
45
46
```

😊 Correct! Well done!

Result:

```
[
  {
    "_id": {
      "year": 2016
    },
    "value": {
      "avg": "4.1624",
      "diff": "-1.11%"
    }
  }
]
```