Name: Chaoyu Li
Date: 4/3/2022

DSCI551- Lab 3

1. Find out how many books have “odd” in their titles (case insensitive) and a rank of at least 10.

```
> db.nyt2.find({"title":/odd/i ,"rank": {$gte:10}}).count()
11
```

2. Add a new attribute/field “read” for all books by “"John Grisham” and “Zadie Smith” and set their values to true.

```
> db.nyt2.update({$or:[{"author":"John Grisham"},{"author":"Zadie Smith"}]},{$set:{"read":true}}
,{multi:true})
WriteResult({ "nMatched" : 235, "nUpserted" : 0, "nModified" : 235 })
```

3. Find out how many books which do not have the “read” field.

```
> db.nyt2.find({"read":{$exists:false}}).count()
9960
```

4. Find out the titles of books whose price is between 10 and 20 (inclusive). Output only the titles. Output the same title only once.

```
> db.nyt2.distinct("title",{price:{$gte: 10,$lte: 20}})
[
        "1225 CHRISTMAS TREE LANE",
        "A CEDAR COVE CHRISTMAS",
        "A WALLFLOWER CHRISTMAS",
        "A WINTER DREAM",
        "ANGELS AT THE TABLE",
        "BLOCKADE BILLY",
        "CALL ME MRS. MIRACLE",
        "GRACE",
        "HEAT WAVE",
        "INTO THE DREAMING",
        "LOST DECEMBER",
        "PROMISE ME",
        "THE BRIDGE",
        "THE CHRISTMAS LIST",
        "THE CHRISTMAS SWEATER",
        "THE CLONE WARS",
        "THE PERFECT CHRISTMAS",
        "THE ROAD TO GRACE"
]
```

5. For each publisher, find out the maximum price of best sellers published by the publisher. Order the publishers by the descending order of the maximum price. Output the first 10 in the list.

```
> db.nyt2.aggregate([{$group:{_id:"$publisher", maximum_price:{$max:"$price"}}},{$sort:{maximum_
price:-1}},{$limit:10}])
{ "_id" : "Dutton", "maximum_price" : 36 }
{ "_id" : "Little, Brown", "maximum_price" : 35 }
{ "_id" : "Scribner", "maximum_price" : 35 }
{ "_id" : "Morrow/HarperCollins", "maximum_price" : 35 }
{ "_id" : "Bantam", "maximum_price" : 35 }
{ "_id" : "Tor/Tom Doherty", "maximum_price" : 34.99 }
{ "_id" : "Knopf", "maximum_price" : 30.5 }
{ "_id" : "Crown", "maximum_price" : 30 }
{ "_id" : "Doubleday", "maximum_price" : 30 }
{ "_id" : "Delacorte", "maximum_price" : 30 }
```