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LAB 12 BASES DE DATOS: Introducción a MongoDB

Ejercicio 1: Product catalog

INSERT:

```python
from pymongo import MongoClient

MONGO_URI = 'mongodb://localhost'

client = MongoClient(MONGO_URI)
db= client ['teststore']
collection =db['products']

##collection.insert_one({"_id":1,"Name":"keyboard","Price":300})
collection.insert_many([{"_id":6,"Name":"Monitor","Price":520},
    {"_id":7,"Name":"Super HDMI cable","Price":470},
    {"_id":8,"Name":"Headphones pro","Price":570},
    {"_id":9,"Name":"MousePad pro","Price":990}])

results = collection.find({})

for r in results:
    print (r)
```

Result of insert:

```
Seleccionar Windows PowerShell
PS D:\UVG\Semestre 1 2021\Bases de datos\lab 12> python tests_mongo.py
{'_id': 1, 'Name': 'keyboard', 'Price': 300}
{'_id': 2, 'Name': 'Monitor', 'Price': 500}
{'_id': 3, 'Name': 'HDMI cable', 'Price': 450}
{'_id': 4, 'Name': 'Headphones', 'Price': 550}
{'_id': 5, 'Name': 'MousePad', 'Price': 950}
{'_id': 6, 'Name': 'Monitor', 'Price': 520}
{'_id': 7, 'Name': 'Super HDMI cable', 'Price': 470}
{'_id': 8, 'Name': 'Headphones pro', 'Price': 570}
{'_id': 9, 'Name': 'MousePad pro', 'Price': 990}
PS D:\UVG\Semestre 1 2021\Bases de datos\lab 12>
```

FIND + parameter

```python
results= collection.find({"Price": 500})

for r in results:
    print (r)
```

Result:

```
PS D:\UVG\Semestre 1 2021\Bases de datos\lab 12> python tests_mongo.py
{'_id': 2, 'Name': 'Monitor', 'Price': 500}
PS D:\UVG\Semestre 1 2021\Bases de datos\lab 12>
```

SORT by price:

```
results= collection.find({}).sort([("Price",1)])

for r in results:
    print (r)
```

Result:

```
PS D:\UVG\Semestre 1 2021\Bases de datos\lab 12> python tests_mongo.
{'_id': 1, 'Name': 'keyboard', 'Price': 300}
{'_id': 3, 'Name': 'HDMI cable', 'Price': 450}
{'_id': 7, 'Name': 'Super HDMI cable', 'Price': 470}
{'_id': 2, 'Name': 'Monitor', 'Price': 500}
{'_id': 6, 'Name': 'Monitor', 'Price': 520}
{'_id': 4, 'Name': 'Headphones', 'Price': 550}
{'_id': 8, 'Name': 'Headphones pro', 'Price': 570}
{'_id': 5, 'Name': 'MousePad', 'Price': 950}
{'_id': 9, 'Name': 'MousePad pro', 'Price': 990}
```

Find with price greater than 500:

```
results= collection.find({"Price": {'$gt': 500 }})


for r in results:
    print (r)
```

Result:

```
PS D:\UVG\Semestre 1 2021\Bases de datos\lab 12> python tests_mongo.py
{'_id': 4, 'Name': 'Headphones', 'Price': 550}
{'_id': 5, 'Name': 'MousePad', 'Price': 950}
{'_id': 6, 'Name': 'Monitor', 'Price': 520}
{'_id': 8, 'Name': 'Headphones pro', 'Price': 570}
{'_id': 9, 'Name': 'MousePad pro', 'Price': 990}
```

Find items containing “pro”

```
results = collection.find ({"Name": {'$regex':'.*pro.*','$options':'i'}})


for r in results:
    print (r)
```

Result :

```
{'_id': 8, 'Name': 'Headphones pro', 'Price': 570}
{'_id': 9, 'Name': 'MousePad pro', 'Price': 990}
```

*** Para Hacer índices por tipo, agregue un campo llamado “Type” y algunos artículos serán de tipo Electronic y otros serán de tipo Furniture

ENSURE INDEX

```
collection.ensure_index([
    ('Type', 1),
    ('Price', 1),
    ('Name', 1)])

results = collection.find ()
```

```
collection.create_index([
    ('Type', 1),
    ('Price', 1),
    ('Name', 1)])

results = collection.find ()


for r in results:
    print (r)
```

EJERCICIO 2 :

LINK A REPOSITORIO DE GITHUB:

https://github.com/coutino568/Lab-12-BD