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Projection Operator

1. Tampilkan semua data di collection products kecuali category dan tags

```
> db.products.find({}, { category:0, tags:0 })
< {
  _id: 3,
  Name: 'Pop Mie Rasa Bakso',
  Price: 2500,
  Category: 'food'
}
{
  _id: 4,
  Name: 'Samsung Galaxy S9+',
  Price: 10000000,
  Category: 'handphone'
}
{
  _id: 5,
  Price: 25000000,
  Category: 'laptop'
}
{
  _id: ObjectId("657aae4d2fdd7d9e3ff012dc"),
  id: '7',
  name: 'QuantumX Tech Watch',
  price: 1990000
}
{
  _id: ObjectId("657aae4d2fdd7d9e3ff012dd"),
  id: '8',
```

2. Tampilkan name dan price pada collection products

```

}
> db.products.find({}, { name: 1, price: 1, _id: 0 })
< {}
{}
{}
{
  name: 'QuantumX Tech Watch',
  price: 1990000
}
{
  name: 'Stellar SoundWave Headphones',
  price: 2999000
}
{
  name: 'ZenMaster Meditation Pillow',
  price: 499900
}
{
  name: 'LunaGlow Skin Elixir',
  price: 999000
}
{
  name: 'SwiftPeak Hiking Backpack',
  price: 3999000
}
{
  name: 'QuantumX Tech Watch',

```

3. Tampilkan name dari collection products dimana tagsnya hanya menampilkan 3 tags di awal

```
> db.products.find({}, { name: 1, tags: { $slice: 3 }, _id: 0 })
< {}
{}
{}
{
  name: 'QuantumX Tech Watch',
  tags: [
    'Gadgets',
    'Tech',
    'Smart'
  ]
}
{
  name: 'Stellar SoundWave Headphones',
  tags: [
    'Fashion',
    'Casual',
    'Trendy'
  ]
}
{
  name: 'ZenMaster Meditation Pillow',
  tags: [
    'Appliances',
    'Household',
    'Cooking'
  ]
}
```

4. Tampilkan name, price dari collection products dimana tagsnya hanya menampilkan 1 tags di akhir

```

> db.products.find({}, { name: 1, price: 1, tags: { $slice: -1 }, _id: 0 })
< {
  {}
  {}
  {
    name: 'QuantumX Tech Watch',
    price: 1990000,
    tags: [
      'Smart'
    ]
  }
  {
    name: 'Stellar SoundWave Headphones',
    price: 2999000,
    tags: [
      'Trendy'
    ]
  }
  {
    name: 'ZenMaster Meditation Pillow',
    price: 499900,
    tags: [
      'Cooking'
    ]
  }
  {
    name: 'LunaGlow Skin Elixir',

```

5. Tampilkan name dari collection products dimana tagsnya ada tags “computer”atau “fan “

```

> db.products.find({ tags: { $in: ["computer", "fan"] } }, { name: 1, _id: 0 })
< {
  name: 'QuantumX Tech Watch'
}
{
  name: 'Stellar SoundWave Headphones'
}

```

Query Modifier

1. Import Collection Actor and Payment

actor	payment
Storage size: 24.58 kB	Storage size: 24.58 kB
Documents: 200	Documents: 200
Avg. document size: 116.00 B	Avg. document size: 116.00 B
Indexes: 1	Indexes: 1
Total index size: 20.48 kB	Total index size: 20.48 kB

2. Tampilkan Jumlah Actor

```
> db.actor.count()
< DeprecationWarning:
< 200
```

3. Tampilkan 5 document dari collection payment

```
> db.payment.find().limit(5)
< {
  _id: ObjectId("6583df24be2056eaf08da045"),
  actor_id: 1,
  first_name: 'PENELOPE',
  last_name: 'GUINNESS',
  last_update: '15/2/2006 04:34:33'
}
{
  _id: ObjectId("6583df24be2056eaf08da046"),
  actor_id: 2,
  first_name: 'NICK',
  last_name: 'WAHLBERG',
  last_update: '15/2/2006 04:34:33'
}
{
  _id: ObjectId("6583df24be2056eaf08da047"),
  actor_id: 3,
  first_name: 'ED',
  last_name: 'CHASE',
  last_update: '15/2/2006 04:34:33'
}
{
  _id: ObjectId("6583df24be2056eaf08da048"),
  actor_id: 4,
```

4. Sembunyikan 56 document pertama dari collection payment

db.payment.find().skip(56)

```
> db.payment.find().skip(56)
< {
  _id: ObjectId("6583df24be2056eaf08da07d"),
  actor_id: 57,
  first_name: 'JUDE',
  last_name: 'CRUISE',
  last_update: '15/2/2006 04:34:33'
}
{
  _id: ObjectId("6583df24be2056eaf08da07e"),
  actor_id: 58,
  first_name: 'CHRISTIAN',
  last_name: 'AKROYD',
  last_update: '15/2/2006 04:34:33'
}
{
  _id: ObjectId("6583df24be2056eaf08da07f"),
  actor_id: 59,
  first_name: 'DUSTIN',
  last_name: 'TAUTOU',
  last_update: '15/2/2006 04:34:33'
}
{
  _id: ObjectId("6583df24be2056eaf08da080"),
  actor_id: 60,
  first_name: 'HENRY',
  last_name: 'BERRY',
  last_update: '15/2/2006 04:34:33'
}
```

5. Tampilkan 4 document dan sembunyikan 49 document dari collection payment

db.payment.find().skip(49).limit(4)

```

> db.payment.find().skip(49).limit(4)
< {
  _id: ObjectId("6583df24be2056eaf08da076"),
  actor_id: 50,
  first_name: 'NATALIE',
  last_name: 'HOPKINS',
  last_update: '15/2/2006 04:34:33'
}
{
  _id: ObjectId("6583df24be2056eaf08da077"),
  actor_id: 51,
  first_name: 'GARY',
  last_name: 'PHOENIX',
  last_update: '15/2/2006 04:34:33'
}
{
  _id: ObjectId("6583df24be2056eaf08da078"),
  actor_id: 52,
  first_name: 'CARMEN',
  last_name: 'HUNT',
  last_update: '15/2/2006 04:34:33'
}
{
  _id: ObjectId("6583df24be2056eaf08da079"),
  actor_id: 53,
  first_name: 'MENA',
  last_name: 'TEMPLE',
  last_update: '15/2/2006 04:34:33'
}
ecommerce >

```

6. Urutkan first_name dan actor_id secara ascending pada collection actor (tampilkan hanya 10 data)

```
> db.actor.find({}, { first_name: 1, actor_id: 1, _id: 0 }).sort({ first_name: 1, actor_id: 1 }).limit(10)
< {
  actor_id: 71,
  first_name: 'ADAM'
}
{
  actor_id: 132,
  first_name: 'ADAM'
}
{
  actor_id: 165,
  first_name: 'AL'
}
{
  actor_id: 173,
  first_name: 'ALAN'
}
{
  actor_id: 125,
  first_name: 'ALBERT'
}
{
  actor_id: 146,
  first_name: 'ALBERT'
}
{
  actor_id: 29,
  first_name: 'ALEC'
}
{
  actor_id: 65,
  first_name: 'ANGELA'
}
{
  actor_id: 144,
```

7. Urutkan payment_date secara descending pada collection Payment


```
> db.payment.find().sort({ payment_date: -1 })
< {
  _id: ObjectId("6583df24be2056eaf08da045"),
  actor_id: 1,
  first_name: 'PENELOPE',
  last_name: 'GUINNESS',
  last_update: '15/2/2006 04:34:33'
}
{
  _id: ObjectId("6583df24be2056eaf08da046"),
  actor_id: 2,
  first_name: 'NICK',
  last_name: 'WAHLBERG',
  last_update: '15/2/2006 04:34:33'
}
{
  _id: ObjectId("6583df24be2056eaf08da047"),
  actor_id: 3,
  first_name: 'ED',
  last_name: 'CHASE',
  last_update: '15/2/2006 04:34:33'
}
{
  _id: ObjectId("6583df24be2056eaf08da048"),
  actor_id: 4,
  first_name: 'JENNIFER',
  last_name: 'DAVIS',
  last_update: '15/2/2006 04:34:33'
}
{
  _id: ObjectId("6583df24be2056eaf08da049"),
  actor_id: 5,
  first_name: 'JOHNNY',
  last_name: 'LOLLOBRIGIDA',
  last_update: '15/2/2006 04:34:33'
}
```