

### Menambahkan collection books

```
> db.books.insertMany([
  { _id: 1, title: "Wawasan Pancasila", authorID: 1, publisherID: 1, price: 71200, stats: {page: 3},
  { _id: 2, title: "Mata Air Keteladanan", authorID: 1, publisherID: 2, price: 106250, stats: {page: 3},
  { _id: 3, title: "Revolusi Pancasila", authorID: 1, publisherID: 1, price: 54400, stats: {page: 3},
  { _id: 4, title: "Self Driving", authorID: 2, publisherID: 1, price: 58650, stats: {page: 286, v: 1},
  { _id: 5, title: "Self Disruption", authorID: 2, publisherID: 2, price: 83300, stats: {page: 40, v: 1}
])
< { acknowledged: true,
  insertedIds: { '0': 1, '1': 2, '2': 3, '3': 4, '4': 5 } }
```

### Menambahkan collection authors

```
> db.authors.insertMany([
  { _id: 1, firstName: "Yudi", lastName: "Latif"},
  { _id: 2, firstName: "Rhenald", lastName: "Kasali"}
])
< { acknowledged: true, insertedIds: { '0': 1, '1': 2 } }
```

### Menambahkan collection publishers

```
> db.publishers.insertMany([
  { _id: 1, publisherName: "Expose"},
  { _id: 2, publisherName: "Mizan"}
])
< { acknowledged: true, insertedIds: { '0': 1, '1': 2 } }
```

1. Gabungkan (menampilkan) data buku dari author id 1 dan author id 2.

```
> db.books.find({"$or":[{"authorID":1}, {authorID:2}]})
< { _id: 1,
  title: 'Wawasan Pancasila',
  authorID: 1,
  publisherID: 1,
  price: 71200,
  stats: { page: 324, weight: 300 },
  publishedAt: 2018-10-01T00:00:00.000Z,
  category: [ 'social', 'politics' ] }
{ _id: 2,
  title: 'Mata Air Keteladanan',
  authorID: 1,
  publisherID: 2,
  price: 106250,
  stats: { page: 672, weight: 650 },
  publishedAt: 2017-09-01T00:00:00.000Z,
  category: [ 'social', 'politics' ] }
{ _id: 3,
  title: 'Revolusi Pancasila',
  authorID: 1,
  publisherID: 1,
  price: 54400,
  stats: { page: 220, weight: 500 },
  publishedAt: 2015-05-01T00:00:00.000Z
```

2. Tampilkan daftar buku dan harga author id 1.

```
> db.books.find({authorID:1}, {title:1, price:1})
< { _id: 1, title: 'Wawasan Pancasila', price: 71200 }
  { _id: 2, title: 'Mata Air Keteladanan', price: 106250 }
  { _id: 3, title: 'Revolusi Pancasila', price: 54400 }
test> |
```

3. Tampilan total jumlah halaman buku author id 2.

```
> db.books.aggregate([
  {$match : {authorID:2}},
  {$group: {_id:"$authorID", "totalPage":{$sum: "$stats.page"}}}
])
< { _id: 2, totalPage: 686 }
test>
```

4. Tampilkan semua field books and authors terkait.

Books:

```
> db.books.aggregate([
  $lookup: {
    "from":"authors",
    "localField":"authorID",
    "foreignField":"_id",
    "as":"authors"
  }
])
< { _id: 1,
  title: 'Wawasan Pancasila',
  authorID: 1,
  publisherID: 1,
  price: 71200,
  stats: { page: 324, weight: 300 },
  publishedAt: 2018-10-01T00:00:00.000Z,
  category: [ 'social', 'politics' ],
  authors: [ { _id: 1, firstName: 'Yudi', lastName: 'Latif' } ] }
{ _id: 2,
  title: 'Mata Air Keteladanan',
  authorID: 1,
  publisherID: 2,
  price: 106250,
  stats: { page: 672, weight: 650 },
```

Authors :

```
> db.authors.aggregate([{\n  $lookup : {\n    from: "books",\n    localField: "_id",\n    foreignField: "authorID",\n    as : "books"\n  }\n}])\n< { _id: 1,\n  firstName: 'Yudi',\n  lastName: 'Latif',\n  books:\n    [ { _id: 1,\n      title: 'Wawasan Pancasila',\n      authorID: 1,\n      publisherID: 1,\n      price: 71200,\n      stats: { page: 324, weight: 300 },\n      publishedAt: 2018-10-01T00:00:00.000Z,\n      category: [ 'social', 'politics' ] },\n      { _id: 2,\n        title: 'Mata Air Keteladanan',\n        authorID: 1,\n        publisherID: 2,
```

5. Tampilkan semua field books, authors, dan publishers terkait.

```
> db.books.aggregate([
  {$lookup:{
    from:"authors",
    localField:"authorID",
    foreignField:"_id",
    as:"Author"
  }},
  {$lookup:{
    from:"publishers",
    localField:"publisherID",
    foreignField:"_id",
    as:"Publisher"
  }}
])
< { _id: 1,
  title: 'Wawasan Pancasila',
  authorID: 1,
  publisherID: 1,
  price: 71200,
  stats: { page: 324, weight: 300 },
  publishedAt: 2018-10-01T00:00:00.000Z,
  category: [ 'social', 'politics' ],
  Author: [ { _id: 1, firstName: 'Yudi', lastName: 'Latif' } ],
  Publisher: [ { _id: 1, publisherName: 'Expose' } ] }
```

6. Tampilkan summary data authors, books, dan publishers sesuai dengan Output.
7. Digital\_outlet ingin memberikan diskon untuk setiap buku, diskon di tentukan melihat harga buku tersebut dengan pembagian seperti ini.

Price < 60.000	1 %
60.000 < Price < 90.000	2 %
90.000 < Price	3 %

```
> db.books.aggregate([
  {$project: {
    "title":1,
    "price":1,
    "promo" : {
      $cond : [{ $lt:["$price", 60000]}, '1%',
        { $cond : [{ $lt:["$price", 90000]}, '2%', '3%']}
      ]
    }
  }
  })
< { _id: 1, title: 'Wawasan Pancasila', price: 71200, promo: '2%' }
  { _id: 2,
    title: 'Mata Air Keteladanan',
    price: 106250,
    promo: '3%' }
```

8. Tampilkan semua nama buku, harga, nama author dan nama publisher, urutkan dari harga termahal ke termurah.
9. Tampilkan data nama buku harga dan publisher, kemudian tampilkan hanya data ke 3 dan ke 4.