

TASK 2

1: Print the name, screen size, and color of products whose color has no "gold" in it.

```
db.products1.find({
  color: { $not: { $eq: "gold" } }
}, {
  name: 1,
  "spec.screen": 1,
  color: 1,
  _id: 0
})
```

2: Print the names of products whose screen is either greater than 7 or color is "white".

```
db.products1.find({
  $or: [
    { price: 699 },
    { storage: 1024 }
  ]
}, {
  name: 1,
  price: 1,
  storage: 1,
  _id: 0
})
```

4: Find the product where CPU is not less than 3 and the releaseDate is not "2011-09-01" (ISODate).

```
db.products1.find({
  $and: [
    { "spec.cpu": { $gte: 3 } },
    { releaseDate: { $ne: new ISODate("2011-09-01") } }
  ]
})
```

5: Find products where no color is "blue" and no price is 899.

```
db.products1.find({
  $nor: [
    { color: "blue" },
    { price: 899 }
  ]
})
```

TASK 2

6: Price should be greater than either 799 or RAM is greater than 12

```
db.products1.find({
  $or: [
    { price: { $gt: 799 } },
    { "spec.ram": { $gt: 12 } }
  ]
})
```

7: Find products that do not have 'white' as a color and are priced below 800

```
db.products1.find({
  color: { $ne: "white" },
  price: { $lt: 800 }
})
```

8: Select products with either blue colour and storage not less than 128

```
db.products1.find({
  $or: [
    { color: "blue" },
    { storage: { $gte: 128 } }
  ]
})
```

9: Find all products that have "white" as a color and a CPU speed greater than the average CPU speed of all products.

```
db.products1.find({
  color: "white",
  "spec.cpu": { $gt: averageCpuSpeed }
})
```

10: Find products released in 2022 with a storage option of 256 or 512.

```
db.products1.find({
  releaseDate: {
    $gte: ISODate("2022-01-01"),
    $lt: ISODate("2023-01-01")
  },
  storage: { $in: [256, 512] }
})
```

11: Find products where the price is not equal to 799 or 899 and the screen size is less than 10.

TASK 2

```
db.products1.find({
  $nor: [
    { price: 799 },
    { price: 899 }
  ],
  "spec.screen": { $lt: 10 }
})
```

12: Find products where the color is not blue, green or red and the price is greater than or equal to 1000.

```
db.products1.find({
  color: { $nin: ["blue", "green", "red"] },
  price: { $gte: 1000 }
})
```

13: Select products where the release date is not in 2015, the RAM is not in 4, 8 and the price is not in 699, 899.

```
db.products1.find({
  $nor: [
    { releaseDate: { $gte: ISODate("2015-01-01"), $lt: ISODate("2016-01-01") } },
    { "spec.ram": { $in: [4, 8] } },
    { price: { $in: [699, 899] } }
  ]
})
```

14: Find products where the colour is black or white, the price is either 799 or 899, and the screen size is greater than 6.

```
db.products1.find({
  $and: [
    {
      $or: [
        { color: "black" },
        { color: "white" }
      ]
    },
    {
      $or: [
        { price: 799 },
        { price: 899 }
      ]
    },
    { "spec.screen": { $gt: 6 } }
  ]
})
```

TASK 2

})