

Q 1 :Find products with either cpu is greater than 2gb or ram is between 4 and 12

```
db.products.find({
  $or: [
    { cpu: { $gt: 2 } },
    { ram: { $gte: 4, $lte: 12 } }
  ]
})
```

Q2 : Find products with niether price is between 600 and 900 nor is it white or blackdb.products.find({

```
$nor: [
  { price: { $gte: 600, $lte: 900 } },
  { color: { $in: ["white", "black"] } }
]
})
```

Q3 : Find products where price exists and there is no gray in the colours.

```
db.products.find({
  price: { $exists: true },
  colors: { $not: { $in: ["gray"] } }
})
```

Q4 : Find products that have either "white" or "black" as a color option and are priced below 800db.products.find({

```
$or: [
  { colors: { $in: ["white", "black"] } },
  { price: { $lt: 800 } }
]
})
```

Q5 : Find products that do not have "gold" as a color and are priced below 700 or have a storage option of 512GBdb.products.find({

```
$and: [
```

```

{ color: { $ne: "gold" } },
{
  $or: [
    { price: { $lt: 700 } },
    { storage: "512GB" }
  ]
}
]
})

```

Q6 : .Find products that have both a RAM size greater than 8GB and a CPU speed less than 2 GHz, or do not have a storage option of 256GBdb.products.find({

```

$or: [
  {
    $and: [
      { ram: { $gt: 8 } },
      { cpu_speed: { $lt: 2 } }
    ]
  },
  { storage: { $ne: "256GB" } }
]
})

```

Q7 : Write a query to find a product whose cpu is not greater than or equal to 2 without using "\$gte","\$lte","\$lt"(\$not) db.products.find({

```

$not: {
  $or: [
    { cpu: { $eq: 2 } },
    { cpu: { $gt: 2 } }
  ]
}

```

```
)
```

Q8 : Find products by the same brand as "SmartTablet" released after 2021 with a price less than 700

```
db.products.find({  
  brand: { $eq: "SmartTablet" },  
  release_year: { $gt: 2021 },  
  price: { $lt: 700 }  
})
```

Q9 : Find product where price between 400 and 900 or ram as 4 units

```
db.products.find({
```

```
  $or: [
```

```
    { price: { $gte: 400, $lte: 900 } },
```

```
    { ram: 4 }
```

```
  ]
```

```
})
```

Q10 : Find product where price is not 699 and ram between 4 and 8 or storage is 16

```
db.products.find({
```

```
  $or: [
```

```
    {
```

```
      price: { $ne: 699 },
```

```
      ram: { $gte: 4, $lte: 8 }
```

```
    },
```

```
    { storage: 16 }
```

```
  ]
```

```
})
```

Q11 : Find product name where price does not exist and screen is less than 10

```
db.products.find({
```

```
  price: { $exists: false },
```

```
  screen_size: { $lt: 10 }
```

```
}, { name: 1 })
```

Q12 : select phone with screen size not greater than 9.5 and ram not in 4,8

```
db.products.find({
```

```
  type: "phone",
```

```
  screen_size: { $lte: 9.5 },
```

```
  ram: { $nin: [4, 8] }
```

```
})
```

Q13 : elect products with cpu power not less than 2.66 nor more than 3.66

```
db.products.find({
```

```
  cpu_power: { $gte: 2.66, $lte: 3.66 }
```

```
})
```

Q14 : select products with either white colour and storage not less than 128

```
db.products.find({
```

```
  $or: [
```

```
    { color: "white" },
```

```
    { storage: { $gte: 128 } }
```

```
  ]
```

```
})
```

Q15 : select products with either blue colour and storage not less than 128

```
db.products.find({
```

```
  $or: [
```

```
    { color: "blue" },
```

```
    { storage: { $gte: 128 } }
```

```
  ]
```

```
})
```