

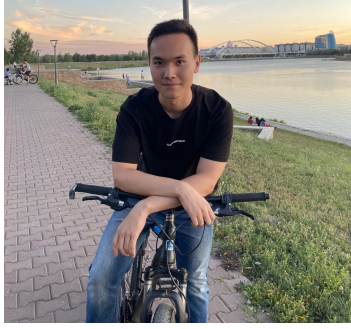


Team: NDY corp.

Midterm 2 Report

Date: April 16, 2023

		
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- 4) Filtering items based on price, rating
- 5) Giving rating for items
- 6) Commenting items

Link to the video~

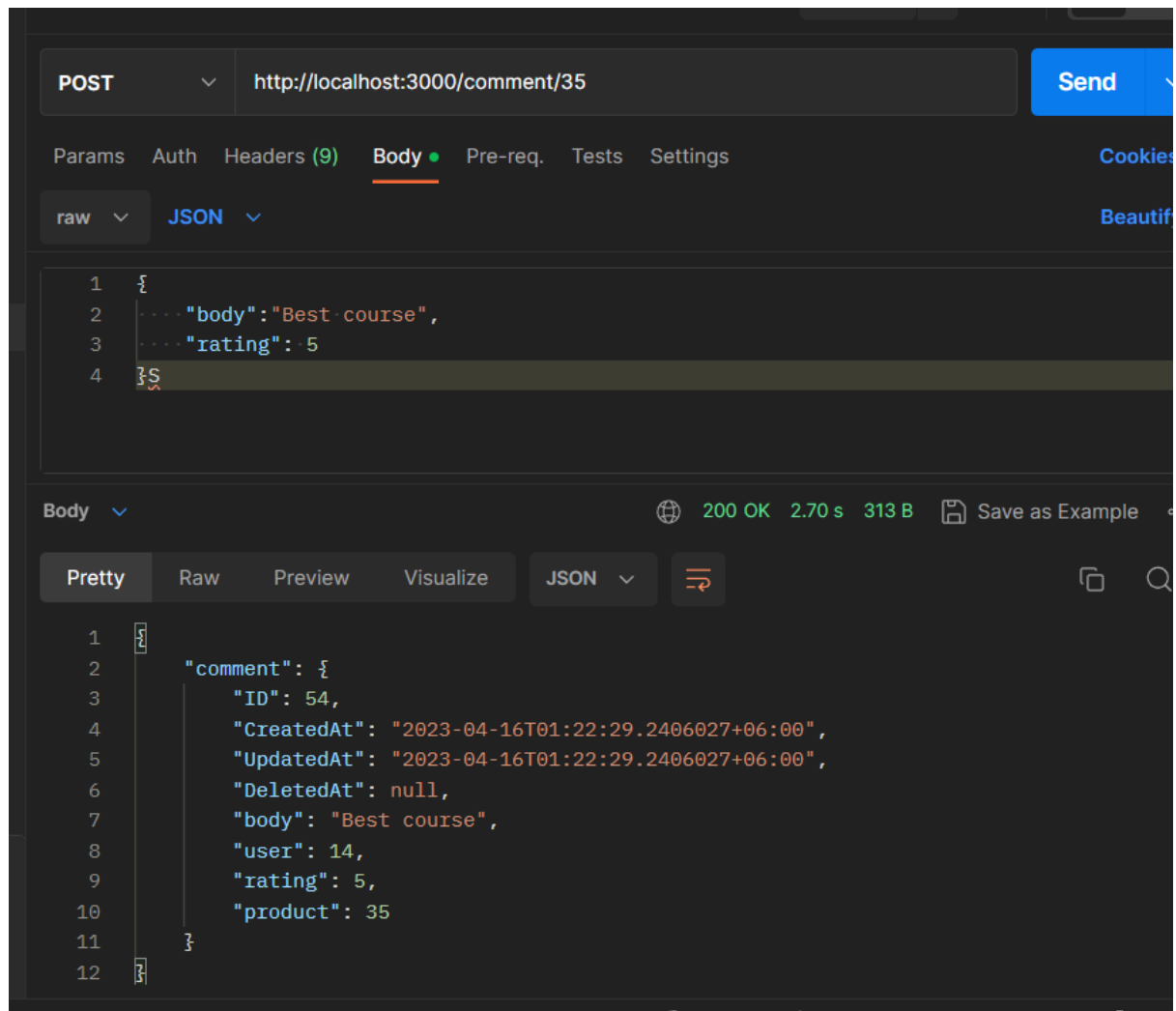
Here is our filter based on *inputTitle* and *inputSort*.

```
func ListProducts(c *gin.Context) {
    qs := c.Request.URL.Query()
    inputTitle := qs.Get("title")
    inputSort := qs.Get("sort")
    var products []models.Product
    if inputTitle != "" && inputSort != "" {
        if inputSort[0] == '-' {
            _ = initializers.DB.Order(fmt.Sprintf(inputSort[1:])).Find(&products, "title = ?", inputTitle)
        } else {
            _ = initializers.DB.Order(fmt.Sprintf(inputSort, " desc")).Find(&products, "title = ?", inputTitle)
        }
    } else if inputTitle != "" {
        _ = initializers.DB.Find(&products, "title = ?", inputTitle)
    } else if inputSort != "" {
        if inputSort[0] == '-' {
            _ = initializers.DB.Order(fmt.Sprintf(inputSort[1:])).Find(&products)
        } else {
            _ = initializers.DB.Order(fmt.Sprintf(inputSort, " desc")).Find(&products)
        }
    } else {
        _ = initializers.DB.Find(&products)
    }

    c.JSON(http.StatusOK, gin.H{"products": products})
}
```

Darkha003, 3 weeks ago • Add Search by title

Here is giving **Rating** and **Commenting** to our *Products*.



Here is shown how our rating is calculating.

So it takes sum of rating, for example max Value which user can give is 5. So let's say like:

1st User give 5 rating.

2nd User give 1 rating.

3rd User give 4 rating.

So it calculate like $5+1+4 / 3$ divided my count of rating. So the result will be **3.3333333**.

```
51     return
52   }
53
54   initializers.DB.Table("comments").Where("product = ?", id).Select("sum(rating) as sm").Scan(&sum)
55   initializers.DB.Table("comments").Where("product = ?", id).Select("count(*) as cnt").Scan(&cnt)
56   avg := sum / cnt
57   initializers.DB.Model(&product).Update("rating", avg)
58
59   c.JSON(http.StatusOK, gin.H{"comment": comment})
60 }
61
```

Here our comments.

comments		products				
	updated_at	deleted_at	body	user	rating	product
11+00	2023-04-15 17:09:07.767711+00	NULL	i don't like it	15	1	2
94+00	2023-04-15 17:10:55.880094+00	NULL	a little misun...	16	2.5	2
+00	2023-04-15 17:14:50.5296+00	NULL	good	16	4	5
04+00	2023-04-15 17:15:07.399104+00	NULL	nice	16	5	8
57+00	2023-04-15 18:26:49.813667+00	NULL	good	14	5	1
25+00	2023-04-15 18:27:12.225325+00	NULL	not bad	14	3	3
38+00	2023-04-15 18:27:27.113438+00	NULL	not interesting	14	1	4
51+00	2023-04-15 18:27:47.132761+00	NULL	interesting	14	4	6
56+00	2023-04-15 18:27:59.572656+00	NULL	bad	14	1	7
9+00	2023-04-15 18:28:25.10849+00	NULL	you should try	14	5	9
58+00	2023-04-15 18:28:46.651768+00	NULL	need better...	14	2	10
33+00	2023-04-15 18:29:02.636183+00	NULL	the best course	14	5	11
55+00	2023-04-15 18:43:32.893665+00	NULL	This is very ni...	14	4	32
92+00	2023-04-15 18:45:02.465992+00	NULL	This is bad co...	15	1	32
33+00	2023-04-15 18:46:33.712583+00	NULL	The best cour...	16	5	32
01+00	2023-04-15 19:19:00.438601+00	NULL	This course is...	14	4	35
72+00	2023-04-15 19:20:21.236872+00	NULL	I hate this co...	15	1	35
27+00	2023-04-15 19:21:39.401427+00	NULL	This course is...	16	4	35
02+00	2023-04-15 19:22:29.240602+00	NULL	Best course	14	5	35

1. <http://localhost:3000/product?sort=rating> - Sorting products by rating from the largest to the smallest.
We have 5 rating types. As you can see it is sorted from *Largest 5 to Smallest 1*.

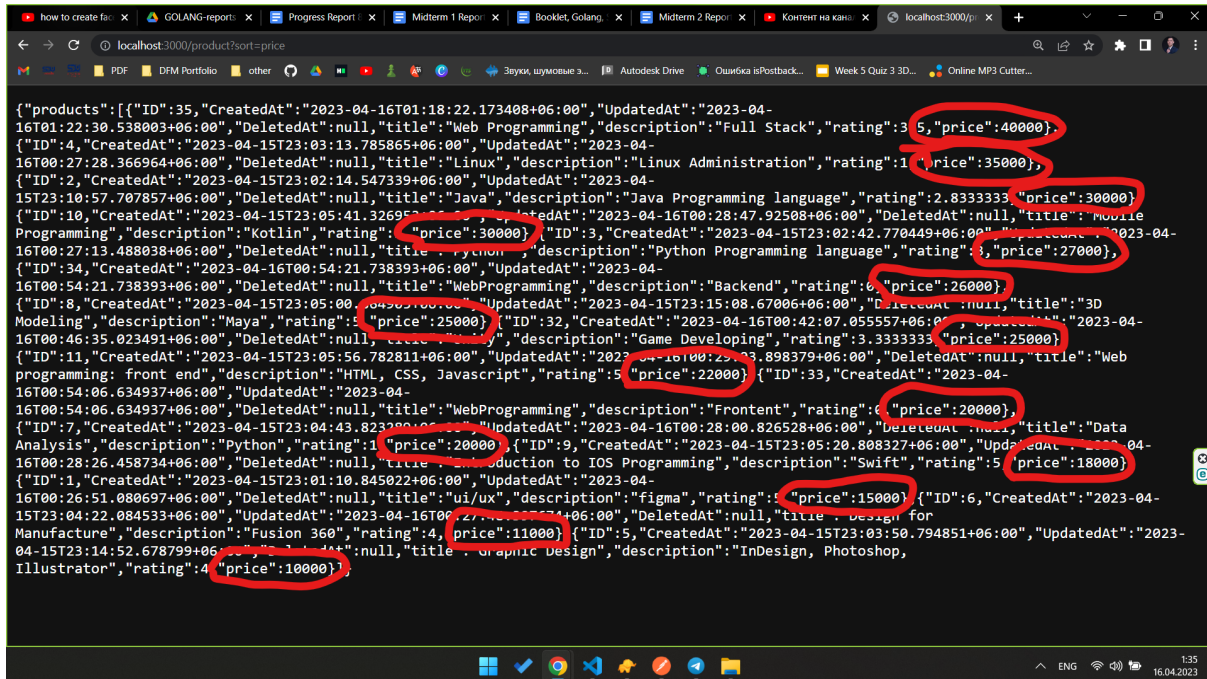
```
{
  "products": [
    {
      "ID": 11,
      "CreatedAt": "2023-04-15T23:05:56.782811+06:00",
      "UpdatedAt": "2023-04-16T00:29:03.898379+06:00",
      "DeletedAt": null,
      "title": "Web programming: front end",
      "description": "HTML, CSS, Javascript",
      "rating": 5,
      "price": 22000
    },
    {
      "ID": 8,
      "CreatedAt": "2023-04-15T23:05:00.864905+06:00",
      "UpdatedAt": "2023-04-15T23:15:08.67006+06:00",
      "DeletedAt": null,
      "title": "3D Modeling",
      "description": "Maya",
      "rating": 5,
      "price": 25000
    },
    {
      "ID": 9,
      "CreatedAt": "2023-04-16T00:26:51.080697+06:00",
      "DeletedAt": null,
      "title": "ui/ux",
      "description": "figma",
      "rating": 5,
      "price": 15000
    },
    {
      "ID": 19,
      "CreatedAt": "2023-04-15T23:05:20.808327+06:00",
      "DeletedAt": null,
      "title": "Introduction to IOS Programming",
      "description": "Swift",
      "rating": 5,
      "price": 18000
    },
    {
      "ID": 5,
      "CreatedAt": "2023-04-15T23:03:50.794851+06:00",
      "UpdatedAt": "2023-04-15T23:14:52.67006+06:00",
      "DeletedAt": null,
      "title": "Graphic Design",
      "description": "InDesign, Photoshop, Illustrator",
      "rating": 4,
      "price": 10000
    },
    {
      "ID": 6,
      "CreatedAt": "2023-04-15T23:04:22.084533+06:00",
      "UpdatedAt": "2023-04-16T00:27:48.397674+06:00",
      "DeletedAt": null,
      "title": "Design for Manufacture",
      "description": "Fusion 360",
      "rating": 4,
      "price": 11000
    },
    {
      "ID": 35,
      "CreatedAt": "2023-04-16T01:18:22.173408+06:00",
      "UpdatedAt": "2023-04-16T01:22:30.538003+06:00",
      "DeletedAt": null,
      "title": "Web Programming",
      "description": "Full Stack",
      "rating": 3.5,
      "price": 40000
    },
    {
      "ID": 32,
      "CreatedAt": "2023-04-16T00:42:07.055557+06:00",
      "UpdatedAt": "2023-04-16T00:46:35.023491+06:00",
      "DeletedAt": null,
      "title": "Unity",
      "description": "Game Developing",
      "rating": 3.333333,
      "price": 25000
    },
    {
      "ID": 3,
      "CreatedAt": "2023-04-15T23:02:42.770449+06:00",
      "UpdatedAt": "2023-04-16T00:27:13.400038+06:00",
      "DeletedAt": null,
      "title": "Python",
      "description": "Python Programming language",
      "rating": 3,
      "price": 27000
    },
    {
      "ID": 2,
      "CreatedAt": "2023-04-15T23:02:14.547339+06:00",
      "UpdatedAt": "2023-04-15T23:10:57.707857+06:00",
      "DeletedAt": null,
      "title": "Java",
      "description": "Java Programming language",
      "rating": 2.833333,
      "price": 30000
    },
    {
      "ID": 10,
      "CreatedAt": "2023-04-15T23:02:13.320333+06:00",
      "UpdatedAt": "2023-04-16T00:28:47.92508+06:00",
      "DeletedAt": null,
      "title": "Mobile Programming",
      "description": "Kotlin",
      "rating": 2,
      "price": 30000
    },
    {
      "ID": 7,
      "CreatedAt": "2023-04-15T23:02:43.823289+06:00",
      "UpdatedAt": "2023-04-16T00:28:00.826528+06:00",
      "DeletedAt": null,
      "title": "Data Analysis",
      "description": "Python",
      "rating": 1,
      "price": 20000
    },
    {
      "ID": 4,
      "CreatedAt": "2023-04-15T23:03:13.785865+06:00",
      "UpdatedAt": "2023-04-16T00:27:28.366964+06:00",
      "DeletedAt": null,
      "title": "Linux",
      "description": "Linux Administration",
      "rating": 1,
      "price": 35000
    },
    {
      "ID": 33,
      "CreatedAt": "2023-04-16T00:54:06.634937+06:00",
      "UpdatedAt": "2023-04-16T00:54:06.634937+06:00",
      "DeletedAt": null,
      "title": "Web Programming",
      "description": "Frontend",
      "rating": 0,
      "price": 20000
    },
    {
      "ID": 34,
      "CreatedAt": "2023-04-16T00:54:21.738393+06:00",
      "UpdatedAt": "2023-04-16T00:54:21.738393+06:00",
      "DeletedAt": null,
      "title": "Web Programming",
      "description": "Backend",
      "rating": 0,
      "price": 26000
    }
  ]
}
```

<http://localhost:3000/product?sort=-rating> - Sorting products by rating from the smallest to the largest.
it is sorted from *Smallest 1 to Largest 5*.

```
{
  "products": [
    {
      "ID": 34,
      "CreatedAt": "2023-04-16T00:54:21.738393+06:00",
      "UpdatedAt": "2023-04-16T00:54:21.738393+06:00",
      "DeletedAt": null,
      "title": "Web Programming",
      "description": "Backend",
      "rating": 0,
      "price": 26000
    },
    {
      "ID": 33,
      "CreatedAt": "2023-04-16T00:54:06.634937+06:00",
      "UpdatedAt": "2023-04-16T00:54:06.634937+06:00",
      "DeletedAt": null,
      "title": "Web Programming",
      "description": "Frontend",
      "rating": 0,
      "price": 20000
    },
    {
      "ID": 4,
      "CreatedAt": "2023-04-15T23:03:13.785865+06:00",
      "UpdatedAt": "2023-04-16T00:27:28.366964+06:00",
      "DeletedAt": null,
      "title": "Linux",
      "description": "Linux Administration",
      "rating": 1,
      "price": 35000
    },
    {
      "ID": 7,
      "CreatedAt": "2023-04-15T23:02:43.823289+06:00",
      "UpdatedAt": "2023-04-16T00:28:00.826528+06:00",
      "DeletedAt": null,
      "title": "Data Analysis",
      "description": "Python",
      "rating": 1,
      "price": 20000
    },
    {
      "ID": 10,
      "CreatedAt": "2023-04-15T23:02:13.320333+06:00",
      "UpdatedAt": "2023-04-16T00:28:47.92508+06:00",
      "DeletedAt": null,
      "title": "Mobile Programming",
      "description": "Kotlin",
      "rating": 2,
      "price": 30000
    },
    {
      "ID": 2,
      "CreatedAt": "2023-04-15T23:02:14.547339+06:00",
      "UpdatedAt": "2023-04-15T23:10:57.707857+06:00",
      "DeletedAt": null,
      "title": "Java",
      "description": "Java Programming language",
      "rating": 2.833333,
      "price": 30000
    },
    {
      "ID": 3,
      "CreatedAt": "2023-04-15T23:02:42.770449+06:00",
      "UpdatedAt": "2023-04-16T00:27:13.400038+06:00",
      "DeletedAt": null,
      "title": "Python",
      "description": "Python Programming language",
      "rating": 3,
      "price": 27000
    },
    {
      "ID": 32,
      "CreatedAt": "2023-04-16T00:42:07.055557+06:00",
      "UpdatedAt": "2023-04-16T00:46:35.023491+06:00",
      "DeletedAt": null,
      "title": "Unity",
      "description": "Game Developing",
      "rating": 3.333333,
      "price": 25000
    },
    {
      "ID": 35,
      "CreatedAt": "2023-04-16T01:18:22.173408+06:00",
      "UpdatedAt": "2023-04-16T01:22:30.538003+06:00",
      "DeletedAt": null,
      "title": "Web Programming",
      "description": "Full Stack",
      "rating": 3.5,
      "price": 40000
    },
    {
      "ID": 6,
      "CreatedAt": "2023-04-15T23:04:22.084533+06:00",
      "UpdatedAt": "2023-04-16T00:27:48.397674+06:00",
      "DeletedAt": null,
      "title": "Design for Manufacture",
      "description": "Fusion 360",
      "rating": 4,
      "price": 11000
    },
    {
      "ID": 5,
      "CreatedAt": "2023-04-15T23:03:50.794851+06:00",
      "UpdatedAt": "2023-04-15T23:14:52.67006+06:00",
      "DeletedAt": null,
      "title": "Graphic Design",
      "description": "InDesign, Photoshop, Illustrator",
      "rating": 4,
      "price": 10000
    },
    {
      "ID": 1,
      "CreatedAt": "2023-04-15T23:01:10.845022+06:00",
      "UpdatedAt": "2023-04-16T00:26:51.080697+06:00",
      "DeletedAt": null,
      "title": "ui/ux",
      "description": "figma",
      "rating": 5,
      "price": 15000
    },
    {
      "ID": 9,
      "CreatedAt": "2023-04-15T23:05:20.808327+06:00",
      "DeletedAt": null,
      "title": "Introduction to IOS Programming",
      "description": "Swift",
      "rating": 5,
      "price": 18000
    },
    {
      "ID": 11,
      "CreatedAt": "2023-04-15T23:05:56.782811+06:00",
      "UpdatedAt": "2023-04-16T00:29:03.898379+06:00",
      "DeletedAt": null,
      "title": "Web programming: front end",
      "description": "HTML, CSS, Javascript",
      "rating": 5,
      "price": 22000
    }
  ]
}
```


<http://localhost:3000/product?sort=price> - Sorting of products by price from the largest to the smallest.

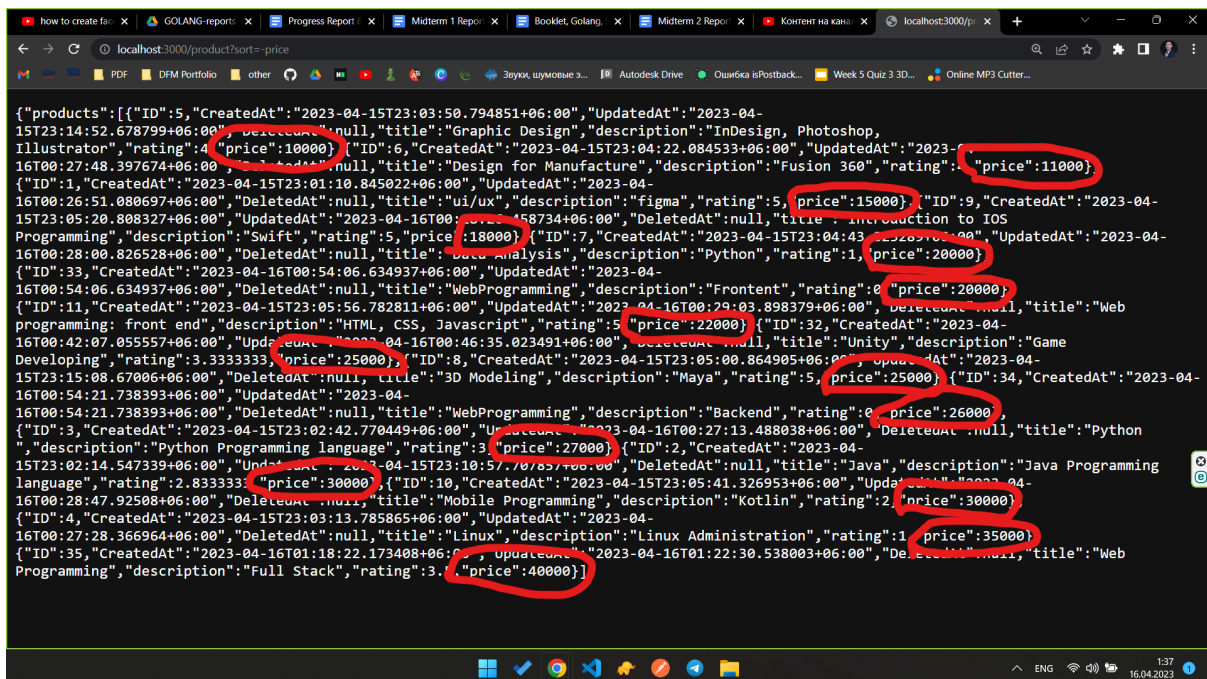
We have our price. It is sorted from *Largest 40000* to *Smallest 10000*.



```
{
  "products": [
    {
      "ID": 35,
      "CreatedAt": "2023-04-16T01:18:22.173408+06:00",
      "UpdatedAt": "2023-04-16T01:22:30.538003+06:00",
      "DeletedAt": null,
      "title": "Web Programming",
      "description": "Full Stack",
      "rating": 3,
      "price": 40000
    },
    {
      "ID": 4,
      "CreatedAt": "2023-04-15T23:03:13.785865+06:00",
      "UpdatedAt": "2023-04-16T00:27:28.366964+06:00",
      "DeletedAt": null,
      "title": "Linux",
      "description": "Linux Administration",
      "rating": 1,
      "price": 35000
    },
    {
      "ID": 2,
      "CreatedAt": "2023-04-15T23:02:14.547339+06:00",
      "UpdatedAt": "2023-04-15T23:10:57.707857+06:00",
      "DeletedAt": null,
      "title": "Java",
      "description": "Java Programming language",
      "rating": 2.833333,
      "price": 30000
    },
    {
      "ID": 10,
      "CreatedAt": "2023-04-15T23:05:41.326953+06:00",
      "UpdatedAt": "2023-04-16T00:27:13.488038+06:00",
      "DeletedAt": null,
      "title": "Mobile Programming",
      "description": "Kotlin",
      "rating": 2,
      "price": 30000
    },
    {
      "ID": 3,
      "CreatedAt": "2023-04-15T23:02:42.770449+06:00",
      "UpdatedAt": "2023-04-16T00:27:13.488038+06:00",
      "DeletedAt": null,
      "title": "Python",
      "description": "Python Programming language",
      "rating": 3,
      "price": 27000
    },
    {
      "ID": 34,
      "CreatedAt": "2023-04-16T00:54:21.738393+06:00",
      "UpdatedAt": "2023-04-16T00:54:21.738393+06:00",
      "DeletedAt": null,
      "title": "WebProgramming",
      "description": "Backend",
      "rating": 0,
      "price": 26000
    },
    {
      "ID": 8,
      "CreatedAt": "2023-04-15T23:05:00.604905+06:00",
      "UpdatedAt": "2023-04-15T23:15:08.67006+06:00",
      "DeletedAt": null,
      "title": "3D Modeling",
      "description": "Maya",
      "rating": 5,
      "price": 25000
    },
    {
      "ID": 32,
      "CreatedAt": "2023-04-16T00:42:07.055557+06:00",
      "UpdatedAt": "2023-04-16T00:46:35.023491+06:00",
      "DeletedAt": null,
      "title": "Game Developing",
      "description": "Unity",
      "rating": 3.333333,
      "price": 25000
    },
    {
      "ID": 11,
      "CreatedAt": "2023-04-15T23:05:56.782811+06:00",
      "UpdatedAt": "2023-04-16T00:29:03.898379+06:00",
      "DeletedAt": null,
      "title": "Web programming: front end",
      "description": "HTML, CSS, Javascript",
      "rating": 5,
      "price": 22000
    },
    {
      "ID": 33,
      "CreatedAt": "2023-04-16T00:54:06.634937+06:00",
      "UpdatedAt": "2023-04-16T00:54:06.634937+06:00",
      "DeletedAt": null,
      "title": "WebProgramming",
      "description": "Frontent",
      "rating": 0,
      "price": 20000
    },
    {
      "ID": 7,
      "CreatedAt": "2023-04-15T23:04:43.823200+06:00",
      "UpdatedAt": "2023-04-16T00:28:00.826528+06:00",
      "DeletedAt": null,
      "title": "Data Analysis",
      "description": "Python",
      "rating": 1,
      "price": 20000
    },
    {
      "ID": 9,
      "CreatedAt": "2023-04-15T23:05:20.808327+06:00",
      "UpdatedAt": "2023-04-16T00:28:26.458734+06:00",
      "DeletedAt": null,
      "title": "Introduction to IOS Programming",
      "description": "Swift",
      "rating": 5,
      "price": 18000
    },
    {
      "ID": 1,
      "CreatedAt": "2023-04-15T23:01:10.845022+06:00",
      "UpdatedAt": "2023-04-16T00:26:51.080697+06:00",
      "DeletedAt": null,
      "title": "ui/ux",
      "description": "figma",
      "rating": 5,
      "price": 15000
    },
    {
      "ID": 6,
      "CreatedAt": "2023-04-15T23:04:22.084533+06:00",
      "UpdatedAt": "2023-04-16T00:27:48.397674+06:00",
      "DeletedAt": null,
      "title": "Design for Manufacture",
      "description": "Fusion 360",
      "rating": 4,
      "price": 11000
    },
    {
      "ID": 5,
      "CreatedAt": "2023-04-15T23:03:50.794851+06:00",
      "UpdatedAt": "2023-04-15T23:14:52.678799+06:00",
      "DeletedAt": null,
      "title": "Graphic Design",
      "description": "InDesign, Photoshop, Illustrator",
      "rating": 4,
      "price": 10000
    }
  ]
}
```

<http://localhost:3000/product?sort=-price> - Sorting of products by price from the smallest to the largest.

We have our price. It is sorted from *Smallest 10000* to *Largest 40000*.



```
{
  "products": [
    {
      "ID": 5,
      "CreatedAt": "2023-04-15T23:03:50.794851+06:00",
      "UpdatedAt": "2023-04-15T23:14:52.678799+06:00",
      "DeletedAt": null,
      "title": "Graphic Design",
      "description": "InDesign, Photoshop, Illustrator",
      "rating": 4,
      "price": 10000
    },
    {
      "ID": 6,
      "CreatedAt": "2023-04-15T23:04:22.084533+06:00",
      "UpdatedAt": "2023-04-16T00:27:48.397674+06:00",
      "DeletedAt": null,
      "title": "Design for Manufacture",
      "description": "Fusion 360",
      "rating": 4,
      "price": 11000
    },
    {
      "ID": 1,
      "CreatedAt": "2023-04-15T23:01:10.845022+06:00",
      "UpdatedAt": "2023-04-16T00:26:51.080697+06:00",
      "DeletedAt": null,
      "title": "ui/ux",
      "description": "figma",
      "rating": 5,
      "price": 15000
    },
    {
      "ID": 9,
      "CreatedAt": "2023-04-15T23:05:20.808327+06:00",
      "UpdatedAt": "2023-04-16T00:28:26.458734+06:00",
      "DeletedAt": null,
      "title": "Introduction to IOS Programming",
      "description": "Swift",
      "rating": 5,
      "price": 18000
    },
    {
      "ID": 7,
      "CreatedAt": "2023-04-15T23:04:43.823200+06:00",
      "UpdatedAt": "2023-04-16T00:28:00.826528+06:00",
      "DeletedAt": null,
      "title": "Data Analysis",
      "description": "Python",
      "rating": 1,
      "price": 20000
    },
    {
      "ID": 33,
      "CreatedAt": "2023-04-16T00:54:06.634937+06:00",
      "UpdatedAt": "2023-04-16T00:54:06.634937+06:00",
      "DeletedAt": null,
      "title": "WebProgramming",
      "description": "Frontent",
      "rating": 0,
      "price": 20000
    },
    {
      "ID": 11,
      "CreatedAt": "2023-04-15T23:05:56.782811+06:00",
      "UpdatedAt": "2023-04-16T00:29:03.898379+06:00",
      "DeletedAt": null,
      "title": "Web programming: front end",
      "description": "HTML, CSS, Javascript",
      "rating": 5,
      "price": 22000
    },
    {
      "ID": 32,
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<http://localhost:3000/product?sort=-price&title=WebProgramming> -

Sorting products and searching at the same time.

Here we have two similar title: “WebProgramming”. And this is by title and

price from smallest to largest

Here it is “price”:20000 to “price”:26000.

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INF 368	The Go programming language	Teacher: Azamat Serek	Project type: Midterm 1
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