

## Lesson 01 Demo 05

### Creating a Function to Sort the Dish List

**Objective:** To create a function to sort the dish list

**Tools required:** Visual Studio Code

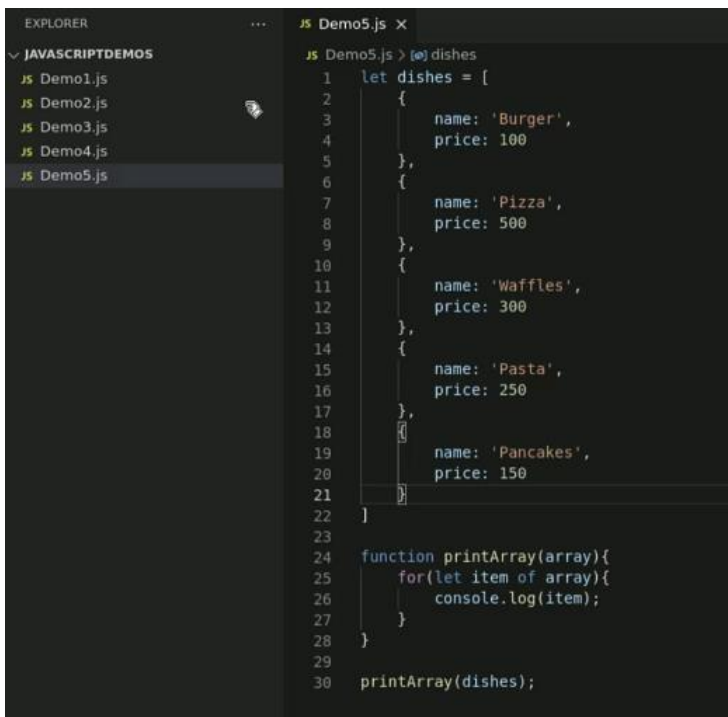
**Prerequisites:** HTML and CSS

Steps to be followed:

1. Create Demo5.js
2. Add a function to display the list in ascending order
3. Add a function to display the list in descending order

#### Step 1: Create Demo5.js

1.1 Create a **Demo5.js** file and add menu items in it

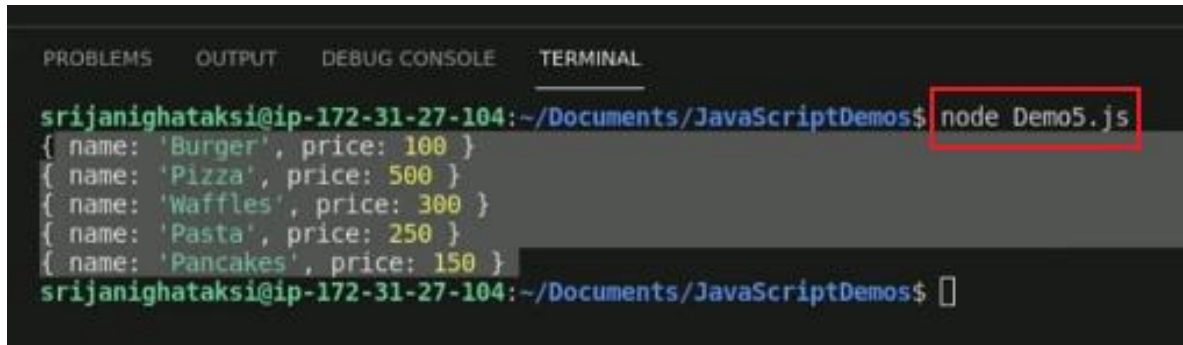


The screenshot shows the Visual Studio Code interface. On the left, the Explorer panel displays a folder named 'JAVASCRIPTDEMOS' containing five files: Demo1.js, Demo2.js, Demo3.js, Demo4.js, and Demo5.js. Demo5.js is selected. The main editor area shows the content of Demo5.js. It starts with a comment 'JS Demo5.js > dishes' followed by a JavaScript array of objects representing dishes. The array includes 'Burger' (price 100), 'Pizza' (price 500), 'Waffles' (price 300), 'Pasta' (price 250), and 'Pancakes' (price 150). Below the array, a function 'printArray' is defined, which iterates over the array and logs each item to the console. Finally, the function is called with 'dishes' as an argument.

```
JS Demo5.js > dishes
1 let dishes = [
2   {
3     name: 'Burger',
4     price: 100
5   },
6   {
7     name: 'Pizza',
8     price: 500
9   },
10  {
11    name: 'Waffles',
12    price: 300
13  },
14  {
15    name: 'Pasta',
16    price: 250
17  },
18  {
19    name: 'Pancakes',
20    price: 150
21  }
22 ]
23
24 function printArray(array){
25   for(let item of array){
26     console.log(item);
27   }
28 }
29
30 printArray(dishes);
```

1.2 Open the **terminal** in this directory and use the following command to run the file:

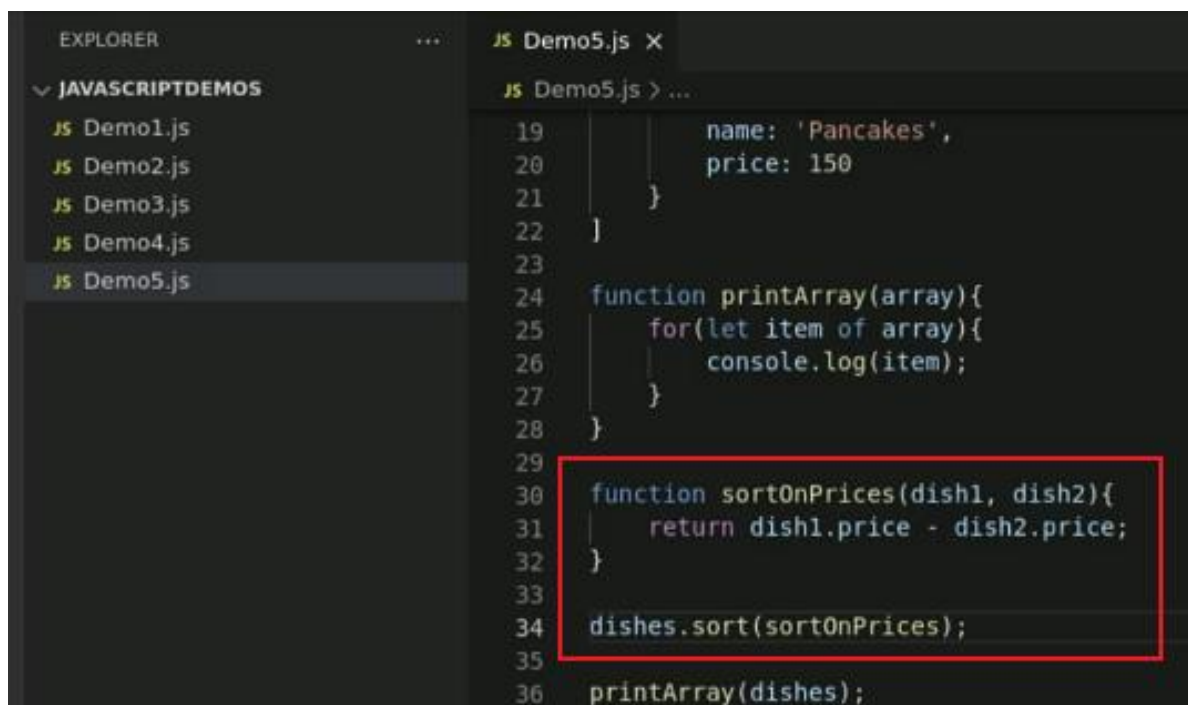
**node Demo5.js**

A screenshot of a terminal window with tabs for PROBLEMS, OUTPUT, DEBUG CONSOLE, and TERMINAL. The terminal shows the command 'node Demo5.js' being executed, which outputs a list of five menu items: { name: 'Burger', price: 100 }, { name: 'Pizza', price: 500 }, { name: 'Waffles', price: 300 }, { name: 'Pasta', price: 250 }, and { name: 'Pancakes', price: 150 }. The prompt is 'srijanighataksi@ip-172-31-27-104:~/Documents/JavaScriptDemos\$'.

```
srijanighataksi@ip-172-31-27-104:~/Documents/JavaScriptDemos$ node Demo5.js
{ name: 'Burger', price: 100 }
{ name: 'Pizza', price: 500 }
{ name: 'Waffles', price: 300 }
{ name: 'Pasta', price: 250 }
{ name: 'Pancakes', price: 150 }
srijanighataksi@ip-172-31-27-104:~/Documents/JavaScriptDemos$
```

## Step 2: Add a function to display the list in ascending order

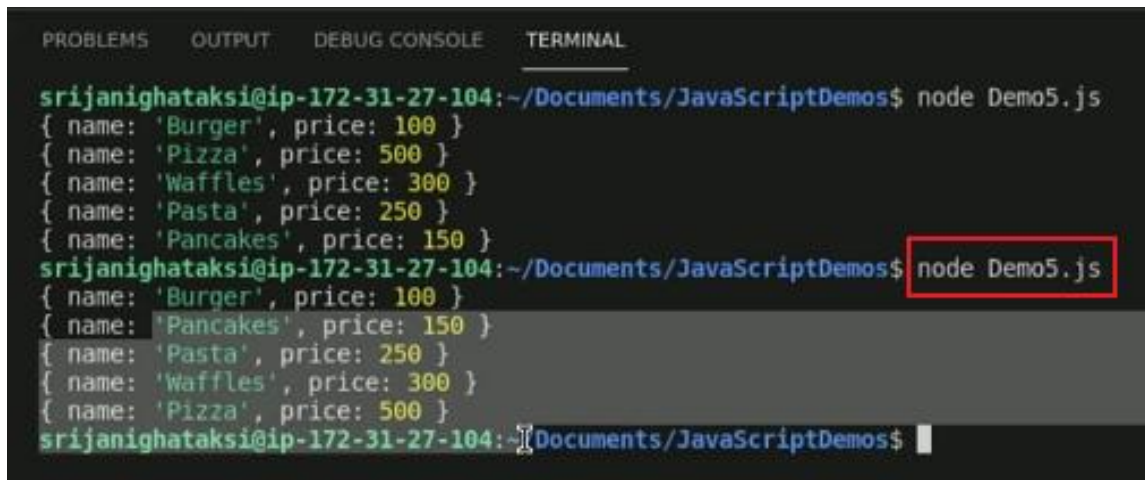
2.1 Add function to display menu items in ascending order

A screenshot of a VS Code editor. The Explorer on the left shows a folder 'JAVASCRIPTDEMOS' with files Demo1.js through Demo5.js. Demo5.js is selected. The main editor shows the code in Demo5.js. Lines 30-34 are highlighted with a red box. The code defines a 'sortOnPrices' function and calls 'dishes.sort(sortOnPrices);'.

```
JS Demo5.js X
JS Demo5.js > ...
19     name: 'Pancakes',
20     price: 150
21   }
22 }
23
24 function printArray(array){
25   for(let item of array){
26     console.log(item);
27   }
28 }
29
30 function sortOnPrices(dish1, dish2){
31   return dish1.price - dish2.price;
32 }
33
34 dishes.sort(sortOnPrices);
35
36 printArray(dishes);
```

2.2 Open the **terminal** in this directory and use the following command to run the file:

**node Demo5.js**



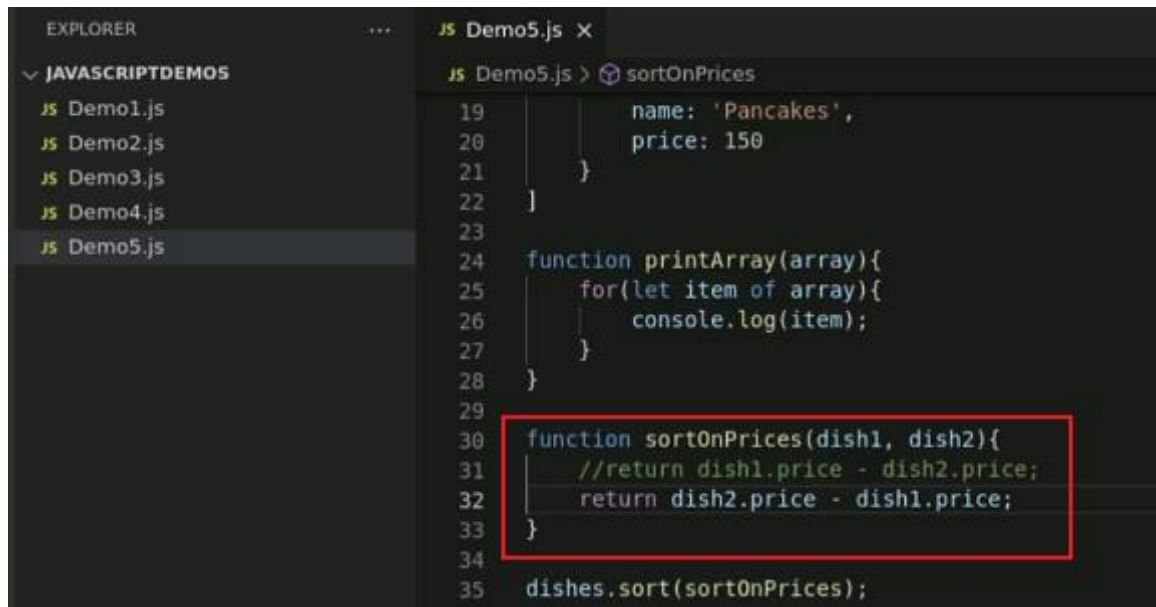
```

srijanighataksi@ip-172-31-27-104:~/Documents/JavaScriptDemos$ node Demo5.js
{ name: 'Burger', price: 100 }
{ name: 'Pizza', price: 500 }
{ name: 'Waffles', price: 300 }
{ name: 'Pasta', price: 250 }
{ name: 'Pancakes', price: 150 }
srijanighataksi@ip-172-31-27-104:~/Documents/JavaScriptDemos$ node Demo5.js
{ name: 'Burger', price: 100 }
{ name: 'Pancakes', price: 150 }
{ name: 'Pasta', price: 250 }
{ name: 'Waffles', price: 300 }
{ name: 'Pizza', price: 500 }
srijanighataksi@ip-172-31-27-104:~/Documents/JavaScriptDemos$

```

### Step 3: Add a function to display the list in descending order

3.1 Add a function to display menu items in descending order



```

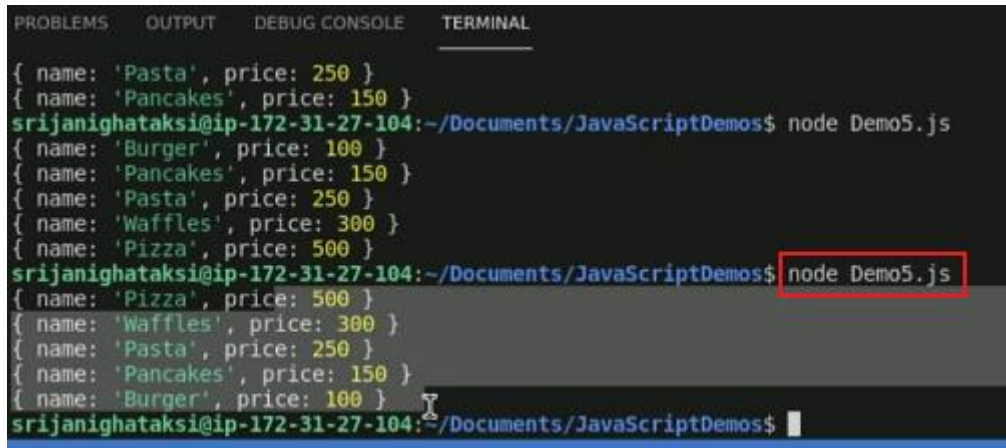
EXPLORER
  ▾ JAVASCRIPTDEMOS
    JS Demo1.js
    JS Demo2.js
    JS Demo3.js
    JS Demo4.js
    JS Demo5.js

JS Demo5.js x
JS Demo5.js > sortOnPrices
19     name: 'Pancakes',
20     price: 150
21   }
22 }
23
24 function printArray(array){
25   for(let item of array){
26     console.log(item);
27   }
28 }
29
30 function sortOnPrices(dish1, dish2){
31   //return dish1.price - dish2.price;
32   return dish2.price - dish1.price;
33 }
34
35 dishes.sort(sortOnPrices);

```

3.2 Open the **terminal** in this directory and use the following command to run the file:

**node Demo5.js**



```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
{ name: 'Pasta', price: 250 }
{ name: 'Pancakes', price: 150 }
srijanighataksi@ip-172-31-27-104:~/Documents/JavaScriptDemos$ node Demo5.js
{ name: 'Burger', price: 100 }
{ name: 'Pancakes', price: 150 }
{ name: 'Pasta', price: 250 }
{ name: 'Waffles', price: 300 }
{ name: 'Pizza', price: 500 }
srijanighataksi@ip-172-31-27-104:~/Documents/JavaScriptDemos$ node Demo5.js
{ name: 'Pizza', price: 500 }
{ name: 'Waffles', price: 300 }
{ name: 'Pasta', price: 250 }
{ name: 'Pancakes', price: 150 }
{ name: 'Burger', price: 100 }
srijanighataksi@ip-172-31-27-104:~/Documents/JavaScriptDemos$
```