1. Write a program to create an array of words present in the given sentence. The array also contains count of the appearance of each word in that sentence. The program has to display the words in sorted order along with its frequency.

**Input**: “JavaScript is a programming language and JavaScript is dynamic and JavaScript is simple to learn”.

**Output**: a: 1, and: 2, dynamic: 1, is: 3, JavaScript: 3, learn: 1, programming: 1, simple: 1, to: 1

1. Create a program which will store few names in an array and then define a sorting mechanism for that array of strings that will help to compare them by length. So, when we sort the array of names, the names are displayed in the ascending order of the length of the String. If the length of any two names are same, then they should be displayed in an alphabetic order.

**Sample input:**

var names = [‘hemanth kumar’ , ‘anil’, ‘jitendra singh’ , ‘joydip’, ‘francis’, ‘arun’];

**Sample output:**

[‘anil’, ‘arun’, ‘joydip’, ‘francis’, ‘hemanth kumar’, ‘jitendra singh’]

1. Create an array of product objects with sample data as given below:

|  |  |  |  |
| --- | --- | --- | --- |
| **Product ID** | **Brand Name** | **Description** | **Price** |
| 200 | Dell | 15 inch Monitor | 3400.44 |
| 120 | Dell | Laptop | 45000.00 |
| 150 | Microsoft | Windows 7 | 7000.50 |
| 100 | Logitech | Optical Mouse | 540.00 |

Write a program to perform the following operations

1. A function to display all the products in a sorted order by default based on their product id.
2. Option for sorting based on Brand name or price based on input provided at runtime.
   1. If two products contain same brand name, description should be considered.
   2. Similarly if products have same price, product id’s should be considered while displaying them in order