1. Write a JavaScript code to create an array where the midst position contains the smallest value followed by the next smallest value on the right of the midst position, followed by the next smallest value to the left of the midst position and the rest of numbers continue in this format

*Objective: How to use array in JavaScript and its different functionalities*

*Capability Code: WEBR003*

*KO Observation No: KO Observation 1*

*Non-KO Observation No: NA*

Description:

1. Create a 3\*3 matrix array (3 rows and 3 columns)
2. Insert values in those arrays (use sample values below)
3. Now create another array (single dimensional) where the values of that two-dimensional array will be placed, but the way that has been explained earlier (refer the sample output below to understand better)

|  |  |  |
| --- | --- | --- |
| UTC | Sample Input | Sample Output |
| 01 | |  |  |  | | --- | --- | --- | | 4 | 2 | 13 | | 3 | 8 | 5 | | 9 | 6 | 17 | | {17,9,6,4,2,3,5,8,13} |
| 02 | |  |  |  | | --- | --- | --- | | 4 | 1 | 3 | | 3 | 8 | 5 | | 4 | 16 | 17 | | {17,8,4,3,1,3,4,5,16} |

1. Write a program to find out unique words in a string and display those words along with their occurrences in the given sentence.

*Objective: How to use array in JavaScript and its different functionalities*

*Capability Code: WEBR003*

*KO Observation No: KO Observation 1*

*Non-KO Observation No: NA*

Description:

The program has to display the words in sorted order along with its frequency.

Sample:

**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 sort the names stored in an array according to the alphabetical order.

*Objective: How to use array in JavaScript and its different functionalities, such as comparison and sorting*

*Capability Code: WEBR003*

*KO Observation No: KO Observation 1*

*Non-KO Observation No: NA*

Description:

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. Product Sorting

*Objective: How to use array in JavaScript and its different functionalities, such as comparison and sorting*

*Capability Code: WEBR003*

*KO Observation No: KO Observation 1*

*Non-KO Observation No: NA*

Description:

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 ids should be considered while displaying them in order