

Cloud Vandana Test Assignment

JAVA:-

1. Create an array with the values (1, 2, 3, 4, 5, 6, 7) and shuffle it.

```
import java.util.Arrays;
import java.util.Collections;
import java.util.List;

public class ShuffleArray {
    public static void main(String[] args) {
        Integer[] intArray = {1, 2, 3, 4, 5, 6, 7};
        List<Integer> intList = Arrays.asList(intArray);
        Collections.shuffle(intList);
        intList.toArray(intArray);
        System.out.println(Arrays.toString(intArray));
    }
}
```

2. Enter a Roman Number as input and convert it to an integer. (Example: IX = 9)

```
import java.util.Scanner;

public class RomanToInteger {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);
        System.out.print("Enter a Roman numeral: ");
        String romanNumeral = scanner.nextLine().toUpperCase();
        int decimalNumeral = 0;
        int lastNumber = 0;
        for (int i = romanNumeral.length() - 1; i >= 0; i--) {
            char ch = romanNumeral.charAt(i);
            switch (ch) {
                case 'I':
```

```

        decimalNumeral = processDecimal(1, lastNumber, decimalNumeral);
        lastNumber = 1;
        break;
    case 'V':
        decimalNumeral = processDecimal(5, lastNumber, decimalNumeral);
        lastNumber = 5;
        break;
    case 'X':
        decimalNumeral = processDecimal(10, lastNumber, decimalNumeral);
        lastNumber = 10;
        break;
    case 'L':
        decimalNumeral = processDecimal(50, lastNumber, decimalNumeral);
        lastNumber = 50;
        break;
    case 'C':
        decimalNumeral = processDecimal(100, lastNumber, decimalNumeral);
        lastNumber = 100;
        break;
    case 'D':
        decimalNumeral = processDecimal(500, lastNumber, decimalNumeral);
        lastNumber = 500;
        break;
    case 'M':
        decimalNumeral = processDecimal(1000, lastNumber, decimalNumeral);
        lastNumber = 1000;
        break;
    }
}

System.out.println("The integer equivalent of " + romanNumeral + " is " + decimalNumeral + ".");
}

public static int processDecimal(int decimal, int lastNumber, int lastDecimal) {

```

```

    if (lastNumber > decimal) {
        return lastDecimal - decimal;
    } else {
        return lastDecimal + decimal;
    }
}
}
}

```

3. Check if the input is pangram or not. (A pangram is a sentence that contains all the alphabets from A to Z).

```

import java.util.Scanner;

public class PangramChecker {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);
        System.out.print("Enter a sentence: ");
        String sentence = scanner.nextLine().toLowerCase();
        boolean[] alphabet = new boolean[26];
        int index;
        for (int i = 0; i < sentence.length(); i++) {
            char character = sentence.charAt(i);
            if (character >= 'a' && character <= 'z') {
                index = character - 'a';
                alphabet[index] = true;
            }
        }
        boolean isPangram = true;
        for (int i = 0; i < 26; i++) {
            if (!alphabet[i]) {
                isPangram = false;
                break;
            }
        }
    }
}

```

```

    }
    if (isPangram) {
        System.out.println("The input is a pangram.");
    } else {
        System.out.println("The input is not a pangram.");
    }
}
}
}

```

JAVA SCRIPT:-

1.Take a sentence as an input and reverse every word in that sentence.

Example - This is a sunny day > shiT si a ynnus yad.

```

function reverseWords(sentence) {
    var words = sentence.split(" ");
    for (var i = 0; i < words.length; i++) {
        words[i] = words[i].split("").reverse().join("");
    }
    return words.join(" ");
}

```

```

var sentence = "This is a sunny day";
var reversedSentence = reverseWords(sentence);
console.log(reversedSentence);

```

2. Perform sorting of an array in descending order.

```
var arr = [3, 1, 6, 2, 4, 8];  
arr.sort(function(a, b) {  
    return b - a;  
});  
console.log(arr);
```

HTML:-

1. Create a basic calculator using HTML, CSS, and JavaScript with the functionality of add, subtract, multiply and divide.

```
<!DOCTYPE html>  
  
<html>  
  
<head>  
    <title>Basic Calculator</title>  
    <style>  
        body {  
            font-family: Arial, sans-serif;  
        }  
        input[type="button"] {  
            width: 50px;  
            height: 50px;  
            font-size: 20px;  
            margin: 5px;  
        }  
        #result {  
            width: 212px;  
            height: 50px;  
            font-size: 20px;  
            text-align: right;  
            padding-right: 5px;  
        }
```

```
</style>
</head>
<body>
  <table>
    <tr>
      <td colspan="4"><input type="text" id="result" disabled></td>
    </tr>
    <tr>
      <td><input type="button" value="7" onclick="document.getElementById('result').value += '7'"></td>
      <td><input type="button" value="8" onclick="document.getElementById('result').value += '8'"></td>
      <td><input type="button" value="9" onclick="document.getElementById('result').value += '9'"></td>
      <td><input type="button" value="/" onclick="document.getElementById('result').value += '/'"></td>
    </tr>
    <tr>
      <td><input type="button" value="4" onclick="document.getElementById('result').value += '4'"></td>
      <td><input type="button" value="5" onclick="document.getElementById('result').value += '5'"></td>
      <td><input type="button" value="6" onclick="document.getElementById('result').value += '6'"></td>
      <td><input type="button" value="-" onclick="document.getElementById('result').value += '-'"></td>
    </tr>
    <tr>
      <td><input type="button" value="1" onclick="document.getElementById('result').value += '1'"></td>
      <td><input type="button" value="2" onclick="document.getElementById('result').value += '2'"></td>
      <td><input type="button" value="3" onclick="document.getElementById('result').value += '3'"></td>
      <td><input type="button" value="+" onclick="document.getElementById('result').value += '+'"></td>
    </tr>
```

```

<tr>
  <td><input type="button" value="0" onclick="document.getElementById('result').value +=
'0'"></td>
  <td><input type="button" value="" disabled></td>
  <td><input type="button" value="" disabled></td>
  <td><input type="button" value="x" onclick="document.getElementById('result').value +=
'*'"></td>
</tr>
<tr>
  <td colspan=2><input type=reset></td>
  <td colspan=2><input type=button value= = onclick=calculate()></td>
</tr>
</table>

<script>
function calculate() {
  var result = document.getElementById("result");
  var expression = result.value;
  result.value = eval(expression);
}
</script>
</body>
</html>

```

2. Create a survey form with Fields; First Name, Last Name, Date of Birth, Country (dropdown), Gender (checkbox), Profession, email, and mobile number. All the input fields are necessary to submit the form. Create two buttons Submit and Reset. Reset will reset the form while clicking on submit, first, it will check all the fields and necessary validations and then a popup will appear displaying all the selected values with labels in front of it. On closing the popup, the form should reset all the values.

```

<!DOCTYPE html>

<html>

<head>

  <title>Survey Form</title>

```

```
<style>

* {
    box-sizing: border-box;
}

body {
    font-family: Arial, sans-serif;
    background-color: #f2f2f2;
}

.container {
    background-color: #ffffff;
    padding: 20px;
    margin: 50px auto;
    max-width: 600px;
    border-radius: 5px;
    box-shadow: 0px 0px 10px rgba(0, 0, 0, 0.2);
}

h1 {
    text-align: center;
}

form {
    margin-top: 20px;
}

label {
    display: block;
    margin-bottom: 5px;
}

input[type="text"], input[type="email"], input[type="date"], select {
    width: 100%;
    padding: 10px;
    margin-bottom: 20px;
    border-radius: 5px;
    border: none;
}
```



```

select {
    height: 40px;
}

input[type="checkbox"] {
    margin-right: 10px;
}

.btn-container {
    display: flex;
    justify-content: space-between;
}

button[type="submit"], button[type="reset"] {
    background-color: #4CAF50;
    color: white;
    padding: 10px 20px;
    border-radius: 5px;
    border: none;
    cursor: pointer;
}
</style>
</head>
<body>
<div class="container">
    <h1>Survey Form</h1>
    <form id="survey-form" onsubmit="return validateForm()">
        <label for="first-name">First Name *</label>
        <input type="text" id="first-name" name="first-name" required>

        <label for="last-name">Last Name *</label>
        <input type="text" id="last-name" name="last-name" required>

        <label for="date-of-birth">Date of Birth *</label>
        <input type="date" id="date-of-birth" name="date-of-birth" required>

```

```
<label for="country">Country *</label>
<select id="country" name="country" required>
  <option value="">--Please select--</option>
  <option value="USA">USA</option>
  <option value="Canada">Canada</option>
  <option value="Mexico">Mexico</option>
  <option value="Other">Other</option>
</select>
```

```
<label>Gender *</label>
<div>
  <input type="checkbox" id="male" name="gender" value="male">
  <label for="male">Male</label>

  <input type="checkbox" id="female" name="gender" value="female">
  <label for="female">Female</label>

  <input type="checkbox" id="other" name="gender" value="other">
  <label for="other">Other</label>
</div>
```

```
<label for="profession">Profession *</label>
<input type="text" id="profession" name="profession" required>
```

```
<label for="email">Email *</label>
<input type="email" id="email" name="email" required>
```

```
<label for="mobile-number">Mobile Number *</label>
<input type="text" id="mobile-number" name="mobile-number"
```

required>

```
<!-- Submit and Reset Buttons -->
<div class="btn-container">
```

```
<button type= "submit">Submit</button>
```

```
<button type= "reset">Reset</button>
```

```
</div>
```

```
</form>
```

```
</div>
```

```
</body>
```

```
</html>
```