ASSIGNMENT

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

```
Public class Array
{
Public static void main (String [] args
{
Integer [] array= {1,2,3,4,5,6,7};
List<Integer> list= Arrays.aslist(array);
Collections.shuffel(list);
Integer[] shuffledArray=list.toArray(new Integer[0]);
System.out.println(Arrays.toString(shuffledArray));
}
}
```

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

```
Public class roman
{
Public static void main(String[] args)
{
String roman=”lx”;
Map<Character,Integer> romanMap= new HashMap<>();
romanMap.put(‘l’,1);
romanMap.put(‘V’,5);
romanMap.put(‘X’,10);
romanMap.put(‘L’,50);
romanMap.put(‘C’,100);
romanMap.put(‘D’,500);
romanMap.put(‘M’,1000);
int result=0;
int prevValue=0;

for(int i=roman.length()-1; i>=0;i--)
{
Int currentValue= romanMap.get(roman.CharAt(i));
If(currentValue<prevValue)
{
Result -=currentValue;
}
else{
result += currentValue;
}
prevValue= currentValue;
}
System.out.println(“Integer Value:”+ result);
}
}
```

3) Check if a string is pangram

```
Public class pangram
{
public static void main(String[] args)
{
String input=" The quick brown fox jumps over the lazy dog";
boolean isPangram= isPangram(input.toLowerCase())'
if(isPangram)
{
System.out.println("the input is a pangram");
}
else{
System.out.println("the input is not a pangram");
}
}
Public static boolean isPangram(String str)
{
For(char ch='a'; ch<='z'; ch++)
{
If(str.indexOf(ch)== -1)
{
Return false;
}
}
Return true;
}
}.
```

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

```
function reverseWordsInSentence(sentence)
{
Const words= sentence.split(' ');
Const reverseWords = words.map(word =>
{
Return word.split(' ').reverse().join(' ');
});
Const reversedSentence = reversedWords.join(' ');
Return reversedSentence;
}
Const inputSentence="Hello world, how are you?";
Const reversedSentence= reverseWordInSentence(inputSentence);
Console.log(reversedSentence);
```

5)perform sorting of an array in descending order

```
const numbers= [5, 2, 9, 1, 5, 6];

numbers.sort((a, b) => b-a);

console.log(numbers);
```

5) Create a basic calculator using HTML, CSS and Javascript

```
<html>
<head>
<style>
body{
front-family: Arial, sans-serif;
}
.calculator{
Width: 300px;
Margin: 0 auto;
Padding: 20px;
Background: #f4f4f4;
Border: 1px solid #ccc;
Border-radius: 5px;
}
Input[type=”text”]
{
Width: 100%;
Margin-bottom: 10px;
Padding: 10px;
Front-size: 18px;
}
Button{
Width: 70px;
Height: 40px;
Margin-right: 5px;
Margin-bottom: 5px;
Front-size: 18px;
}
</style>
</head>
<body>
<div class=”calculator”>
<input type=”text” id=”display” readonly>
<button onclick=”clearDisplay()”>C</button>
<button onclick=”appendToDisplay(‘ 7‘)”>7 </button>
<button onclick=”appendToDisplay(‘ 8‘)”>8 </button>
<button onclick=”appendToDisplay(‘9 ‘)”>9 </button>
<button onclick=”appendToDisplay(‘ +‘)”>+ </button>
<button onclick=”appendToDisplay(‘ 4‘)”> 4</button>
<button onclick=”appendToDisplay(‘5 ‘)”>5 </button>
<button onclick=”appendToDisplay(‘6 ‘)”>6 </button>
<button onclick=”appendToDisplay(‘- ‘)”>- </button>
<button onclick=”appendToDisplay(‘ 1‘)”>1 </button>
<button onclick=”appendToDisplay(‘2 ‘)”>2 </button>
<button onclick=”appendToDisplay(‘ 3‘)”> 3</button>
<button onclick=”appendToDisplay(‘* ‘)”>* </button>
<button onclick=”appendToDisplay(‘ 0‘)”> 0</button>
```

```
<button onclick=”appendToDisplay(‘. ‘)”>. </button>
<button onclick=”calculate()”>=</button>
<button onclick=”appendToDisplay(‘/’)”>/</button>
</div>
<script>
Function clearDisplay()
{
document.getElementById(‘display’).value= ‘ ‘;
}
Function appendToDisplay(value)
{
Document.getElementById(‘display’).value += value;
}
Function calculate(){
Try{
Document.getElementById(‘display’).value =
eval(document.getElementById(‘display’).value);
}
Catch(error){
Document.getElementById(‘display’).value= ‘Error’;
}
}
</script>
</body>
</html>
```

6) 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. Use the following image for reference

```
<body>

<form id=”surveyform” onSubmit=”return false;”>
<label for=”firstName”> First Name:</label>
<input type=”text” id=”firstName” required><br>

<label for=”lastName”> Last Name:</label>
<input type=”text” id=”Last Name” required><br>

<label for=”dob”> Date of birth:</label>
<input type=”date” id=”dob” required><br>

<label for=”country”> country:</label>
```

```
<select id=”country” required>
<option value=” USA“> USA</option>
<option value=”Canada “>Canada </option>
<option value=” UK“> UK</option>
<!---Add more options as needed-->
</select><br>
<label>Gender:</label><br>
<input type=” checkbox“ id=”male “  name=”gender “  value=” Male ”>
<label for=”male “>Male  </label><br>
<input type=”  checkbox  “ id=”female  “  name=”gender “  value=” female ”>
<label for=”female “>Female  </label><br>
<input type=” checkbox “ id=”other  “  name=”gender “  value=”other  ”>
<label for=”other “> Other </label><br>

<label for=”profession”>profession:</label>
<input type=”text” id=”profession” required><br>


<label for=”email”>Email:</label>
<input type=”email” id=”email” required><br>


<label for=”mobile number”>Mobile number:</label>
<input type=”tel” id=”mobileNumber” required><br>

<button type=”submit” onclick=”submitForm()”>submit</button>
<button type=”reset”>Reset</button>
</form>

<div id=”popup” class=”popup”>
<span id=”popupContent”></span>
<button onclick=”closePopup()”>close</button>
</div>

<script>
Function submitForm()
{
Const  firstName=document.getElementById(‘firstName’).value;
Const  LastName=document.getElementById(‘lastName’).value;
Const  dob=document.getElementById(‘dob’).value;
Const  country=document.getElementById(‘country’).value;
Const  gender=document.getElementById(‘gender’).value;
Const  profession=document.getElementById(‘profession’).value;
Const  email=document.getElementById(‘email’).value;
Const  mobileNumber=document.getElementById(‘MobileNumber’).value;

Const popupContent=
   First name:$(firstName)
   Last name:$(lastName)
     Date of birth :$(dob)
  Country: $(country)
```

```
Gender: $(gender)
Profession :$(profession)
Email :$(email)
Mobile number: $(mobile numeber)
;

document.getElementById('popupContent').textContent= popupContent;
document.getElementById('popup').style.display='block';

document.getElementById('surveyForm').reset();
}

Function closePopup(){
Document.getElementById('popup').style.display = 'none';
}
</script>
</body>
</html>
```