1. JAVA

a) check if the input is pangram or not

```
import java.io.*;
import java.util.*;
class Panagram {
        public static boolean checkPangram(String str)
        {
                boolean[] mark = new boolean[26];
                int index = 0;
                for (int i = 0; i < str.length(); i++) {
                         if ('A' <= str.charAt(i)&& str.charAt(i) <= 'Z')
                                  index = str.charAt(i) - 'A';
                         else if ('a' <= str.charAt(i)&& str.charAt(i) <= 'z')
                                  index = str.charAt(i) - 'a';
                         else
                                  continue;
                         mark[index] = true;
                }
                for (int i = 0; i \le 25; i++)
                         if (mark[i] == false)
                                  return (false);
                return (true);
        }
        public static void main(String[] args)
        {
        Scanner sc= new Scanner(System.in);
        System.out.print("Enter a string: ");
        String str= sc.nextLine();
                if (checkPangram(str) == true)
                         System.out.print(str + " \nis a pangram.");
```

Enter a string: The quick brown fox jumps over the lazy dog
The quick brown fox jumps over the lazy dog
is a pangram.

B) SHUFFLE ARRAY

```
package com.arraysshf.examples;
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));
                }
}
```

OUT PUT:

[1, 7, 5, 2, 3, 6, 4]

C)CONVERTING ROMAN TO INT

```
import java.util.*;
import java.io.*;
import java.lang.Math;
public class RomanToInteger1
 int value(char r)
  if (r == 'I')
   return 1;
  if (r == 'V')
   return 5;
  if (r == 'X')
   return 10;
  if (r == 'L')
   return 50;
  if (r == 'C')
   return 100;
  if (r == 'D')
   return 500;
  if (r == 'M')
   return 1000;
  return -1;
 int convertRomanToInt(String s)
  int total = 0;
  for (int i=0; i<s.length(); i++)</pre>
  {
   int s1 = value(s.charAt(i));
   if (i+1 <s.length())
```

```
{
    int s2 = value(s.charAt(i+1));
    if (s1 \ge s2)
     total = total + s1;
    }
    else
    {
     total = total - s1;
    }
   }
   else
   {
    total = total + s1;
   }
  }
  return total;
 }
 public static void main(String args[])
  RomanToInteger1 ob = new RomanToInteger1();
  String romanStr= "VII";
  System.out.println("The corresponding Integer value is: "+ob.convertRomanToInt(romanStr));
 }
}
```

The corresponding Integer value is: 7

2.JAVA SCRIPT

A)Descending order of arrays

```
<!DOCTYPE html>
<html>
<body>
<h2>JavaScript Arrays</h2>
The Array.sort() method sorts the elements of an array.

<script>
const points = [40, 100, 1, 5, 25, 10];
points.sort(function(a, b){return b-a});
document.getElementById("demo").innerHTML = points;
</script>
</body>
</html>
```

OUTPUT:

The Array.sort() method sorts the elements of an array.

100,40,25,10,5,1

B) reverse the sentence

```
<!DOCTYPE html>
<html>
<body>
<script>
function reverse(str, start, end)
{
        let temp;
        while (start <= end)
        {
                temp = str[start];
                str[start] = str[end];
                str[end] = temp;
                start++;
                end--;
        }
}
function reverseWords(s)
{
        s = s.split("");
        let start = 0;
        for (let end = 0;
                         end < s.length; end++)
        {
                if (s[end] == ' ')
                {
                        reverse(s, start, end);
                         start = end + 1;
```

```
}

reverse(s, start, s.length - 1);

reverse(s, 0, s.length - 1);

return s.join("");

}

var s =

"i like this program very much ";

document.write(reverseWords(s));

</script>

</body>

</html>
```

much very program this like i

3.HTML

A)CREATE A BASIC CALCULATOR

1.index.html

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="utf-8" />
  <meta name="viewport" content="width=device-width, initial-scale=1.0" />
  <title>Calculator</title>
  <!-- Google Font -->
  <link href="https://fonts.googleapis.com/css2?family=Roboto+Mono:wght@500&display=swap"</pre>
rel="stylesheet" />
  <!-- Stylesheet -->
  <link rel="stylesheet" href="style.css" />
</head>
<body>
  <div class="calculator">
    <div class="display">
      <input type="text" placeholder="0" id="input" disabled />
    </div>
    <div class="buttons">
      <!-- Full Erase -->
      <button value="AC" id="clear" class="operation-button">AC</button>
      <!-- Erase Single Value -->
      <button value="DEL" id="erase" class="operation-button">DEL</button>
      <button value="/" class="operation-button button">/</button>
      <button value="*" class="operation-button button">*</button>
      <button value="7" class="digit-button button" />7</button>
      <button value="8" class="digit-button button" />8</button>
      <button value="9" class="digit-button button" />9</button>
```

```
<button value="-" class="operation-button button" />-</button>
      <button value="6" class="digit-button button" />6</button>
      <button value="5" class="digit-button button" />5</button>
      <button value="4" class="digit-button button" />4</button>
      <button value="+" class="operation-button button" />+</button>
      <button value="1" class="digit-button button" />1</button>
      <button value="2" class="digit-button button" />2</button>
      <button value="3" class="digit-button button" />3</button>
      <button value="=" id="equal" class="operation-button" />=</button>
      <button value="0" class="digit-button button" id="zero" />0</button>
      <button value="." class="digit-button button" />.</button>
    </div>
    <div class="main">
      Developed by
        <a href="https://acecoder.org/" target="_blank">ACE CODER</a> 🅚
      </div>
  </div>
  <!-- Script -->
  <script src="script.js"></script>
</body>
</html>
```

B)Style.css

```
* {
padding: 0;
margin: 0;
box-sizing: border-box;
font-family: "Roboto Mono", monospace;
}
body {
height: 100vh;
background-color: #dadff7;
}
.calculator {
width: 400px;
background-color: #071013;
 padding: 50px 30px 20px 30px;
 position: absolute;
transform: translate(-50%, -50%);
top: 50%;
left: 50%;
border-radius: 8px;
box-shadow: 0 20px 50px rgba(0, 5, 24, 0.4);
}
.display {
width: 100%;
.display input {
width: 100%;
 padding: 15px 10px;
text-align: right;
 border: none;
 background-color: transparent;
```

```
color: #ffffff;
 font-size: 35px;
}
.display input::placeholder {
 color: #9490ac;
}
.buttons {
 display: grid;
 grid-template-columns: repeat(4, 1fr);
 grid-gap: 20px;
 margin-top: 40px;
}
button {
 font-size: 20px;
 padding: 17px;
 border: none;
 color: #ffffff;
 cursor: pointer;
 border-radius: 5px;
 border-radius: 10px;
}
button#equal {
 grid-row: span 2;
}
button#zero {
 grid-column: span 2;
}
.operation-button {
```

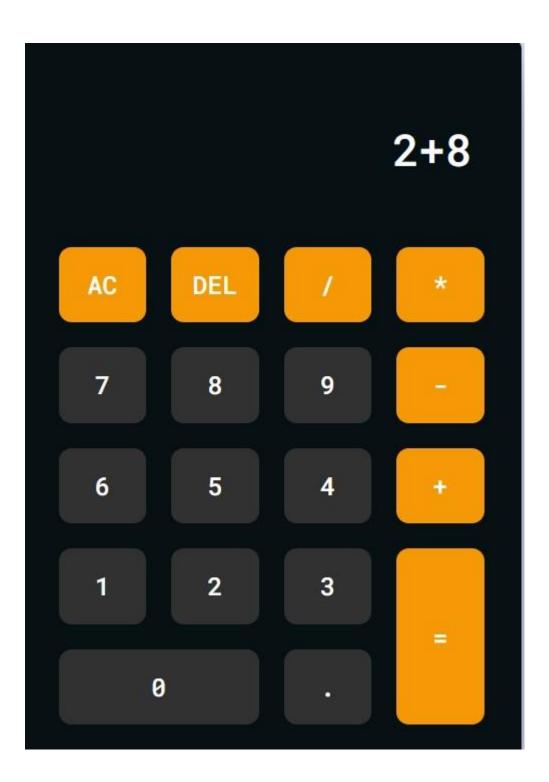
```
background-color: #f69906;
}
.operation-button:hover {
background-color: #eef606db;
}
.digit-button {
background-color: #313131;
}
.digit-button:hover {
background-color: #313131a8;
}
.main {
margin-top: 10%;
}
.brand {
text-align: center;
color: white;
}
a {
color: white;
font-weight: 800;
}
a:hover {
color: #f69906;
}
```

3.Script.js

let equalPressed = 0;

```
let buttonInput = document.querySelectorAll(".button");
let input = document.getElementById("input");
let equal = document.getElementById("equal");
let clear = document.getElementById("clear");
let erase = document.getElementById("erase");
window.onload = () => {
 input.value = "";
};
buttonInput.forEach((buttonClass) => {
 buttonClass.addEventListener("click", () => {
  if (equalPressed === 1) {
   equalPressed = 0;
  }
  input.value += buttonClass.value;
 });
});
equal.addEventListener("click", () => {
 equalPressed = 1;
 let inputValue = input.value;
 try {
  let solution = eval(inputValue);
  if (Number.isNaN(solution) | !Number.isFinite(solution)) {
   throw new Error("Invalid mathematical expression");
  }
  if (Number.isInteger(solution)) {
   input.value = solution;
  } else {
   input.value = solution.toFixed(2);
  }
```

```
} catch (error) {
  alert(error.message);
 }
});
equal.addEventListener("click", () => {
 equalPressed = 1;
 let inputValue = input.value;
 console.log(inputValue, "hvyutfv");
 try {
  let solution = eval(inputValue);
  if (Number.isNaN(solution) | | !Number.isFinite(solution)) {
   throw new Error("Invalid mathematical expression");
  }
  if (Number.isInteger(solution)) {
   input.value = solution;
  } else {
   input.value = solution.toFixed(2);
  }
 } catch (error) {
  alert(error.message);
 }
});
clear.addEventListener("click", () => {
 input.value = "";
});
erase.addEventListener("click", () => {
 input.value = input.value.substr(0, input.value.length - 1);
});
```



B) CREATING A SURVEY FORM

```
<html lang="en">
<head>
       <meta charset="UTF-8">
       <meta http-equiv="X-UA-Compatible"
               content="IE=edge">
       <meta name="viewport"
               content="width=device-width, initial-scale=1.0">
       <title>
               Build a Survey Form using HTML and CSS
       </title>
       <style>
               body {
                       background-color: #0000ff;
                       font-family: Verdana;
                       text-align: center;
               }
               form {
                       background-color: #fff;
                       max-width: 500px;
                       margin: 50px auto;
                       padding: 30px 20px;
                       box-shadow: 2px 5px 10px rgba(0, 0, 0, 0.5);
               }
               .form-control {
                       text-align: left;
                       margin-bottom: 25px;
               }
               .form-control label {
                       display: block;
                       margin-bottom: 10px;
               }
```

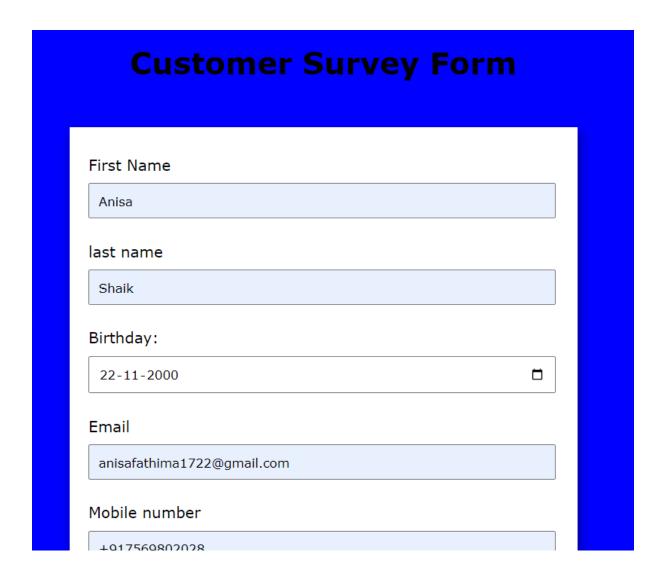
```
.form-control input,
               .form-control select,
               .form-control textarea {
                        border: 1px solid #777;
                        border-radius: 2px;
                       font-family: inherit;
                        padding: 10px;
                        display: block;
                       width: 95%;
               }
               .form-control input[type="radio"],
               .form-control input[type="checkbox"] {
                        display: inline-block;
                       width: auto;
               }
               button {
                        background-color: #05c46b;
                        border: 1px solid #777;
                        border-radius: 2px;
                       font-family: inherit;
                       font-size: 21px;
                        display: block;
                       width: 100%;
                        margin-top: 50px;
                        margin-bottom: 20px;
               }
       </style>
</head>
<body>
       <h1>Customer Survey Form</h1>
```

```
<form id="form">
              <div class="form-control">
                      <label for="name" id="label-name">
                              First Name
                      </label>
                      <input type="text"
                              id="name"
                              placeholder="Enter your name" />
              </div>
 <div class="form-control">
                      <label for="last name" id="label-last name">
                              last name
                      </label>
                      <!-- Input Type Text -->
                      <input type="text"
                              id="last name"
                              placeholder="Enter your last name" />
              </div>
 <div class="form-control">
  <label for="birthday">Birthday:</label>
<input type="date" id="birthday" name="birthday">
</div>
              <div class="form-control">
                      <label for="email" id="label-email">
                              Email
                      </label>
                      <!-- Input Type Email-->
                      <input type="email"
                              id="email"
                              placeholder="Enter your email" />
              </div>
```

```
<div class="form-control">
 <label for="email" id="label-email">
                              Mobile number
                      </label>
<input type="mobile number"
    id="mobile number"
    placeholder="enter your mobile"/>
   </div>
               <div class="form-control">
                      <label for="role" id="label-role">
                             country
                      </label>
                      <select name="role" id="role">
                              <option value="INDIA">INDIA</option>
                              <option value="AFGHANISTAN">AFGHANISTAN</option>
                              <option value="CANADA">
                                     CANADA
                              </option>
       <option value="china">
        CHINA
       </option>
                             <option value="other">Other</option>
                      </select>
              </div>
              <div class="form-control">
                      <label>
                             Gender
                      </label>
                      <label for="recommed-1">
                              <input type="radio"
                                     id="recommed-1"
```

```
name="recommed">Male</input>
       </label>
       <label for="recommed-2">
               <input type="radio"
                      id="recommed-2"
                      name="recommed">Female</input>
       </label>
       <label for="recommed-3">
               <input type="radio"
                      id="recommed-3"
                      name="recommed">Other</input>
       </label>
</div>
<div class="form-control">
       <label>Profession
               <small>(Check all that apply)</small>
       </label>
       <!-- Input Type Checkbox -->
       <label for="inp-1">
               <input type="checkbox"
                      name="inp">Student</input></label>
       <label for="inp-2">
               <input type="checkbox"
                      name="inp">Intern</input></label>
       <label for="inp-3">
               <input type="checkbox"
                      name="inp">Employee</input></label>
       <label for="inp-4">
</div>
<div class="form-control">
```

```
<label for="comment">
                            Any comments or suggestions
                     </label>
                     <textarea name="comment" id="comment"
                             placeholder="Enter your comment here">
                     </textarea>
              </div>
              <button type="submit" value="submit">
                     Submit
              </button>
     <button type="RESET" value="reset">
                     Reset
              </button>
       </form>
</body>
</html>
```



Mobile number	
+917569802028	
country	
INDIA	
Gender	
○ Male	
Female	
○ Other	
Profession (Check all that apply)	
☑ Student	
□Intern	
□ Employee	
Any comments or suggestions	

• Female
○ Other
Profession (Check all that apply)
☑ Student
□Intern
□ Employee
Any comments or suggestions
Submit
Donat
Reset