

**VIT<sup>®</sup>****Vellore Institute of Technology**  
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## Lab CAT 2

**B.Tech in Computer Science and Engineering (CSE), Winter Semester 2020-2021**

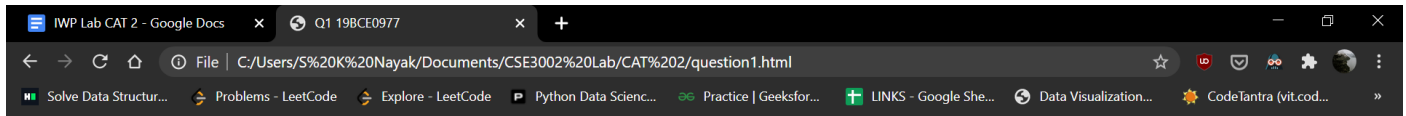
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<b>Registration Number:</b>	19BCE0977
<b>Slot:</b>	L27 + L28
<b>Date:</b>	30/04/2021

## Question B

a) This problem will guide you through creating a JS program that accomplishes the following task. The user is prompted to enter numbers until he hits cancel. Then, a histogram of these numbers is printed to the browser. For example, if the user inputs the numbers 5 7 4 2, the browser should output the following picture: [5 Marks]

### Source code:

```
<!DOCTYPE html>
<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>Q1 19BCE0977</title>
</head>
<body>
  <script>
    var input;
    var inparr = [];
    do {
      input = prompt("Enter a number:");
      if(!(input === null)){
        inparr.push(input);
      }
    }while(!(input === null));
    for(var i = 0; i < inparr.length; i++){
      inparr[i] = parseInt(inparr[i]);
      for(var j = 0; j < inparr[i]; j++){
        document.write("*");
      }
      document.write("<br>");
    }
  </script>
</body>
</html>
```

**Output:**

```
****
*****
**
*****
*****
```



b) Design the following Form and validate all form components using Client-side Javascript. (i.e appropriate regular expression pattern should be followed). [10 Marks]

Source code:

HTML

```
<!DOCTYPE html>
<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>Question 2 19BCE0977</title>
</head>

<body>
  <form id="q2">
    <table>
      <tr>
```

```
<td>Full Name</td>
<td><input type="text" name="full-name" id="full-name"></td>
<td id="fn-inc">Format: FirstName, LastName</td>
</tr>
<tr>
<td>Email</td>
<td><input type="text" name="email" id="email"></td>
<td id="em-inc"></td>
</tr>
<tr>
<td>Password</td>
<td><input type="password" name="pwd" id="pwd"></td>
<td id="pwd-inc">Only a-z A-Z 0-9 @ ! allowed</td>
</tr>
<tr>
<td>Date of Birth</td>
<td><input type="text" placeholder="mm/dd/yyyy" name="dob"
id="dob"></td>
<td id="dob-inc"></td>
</tr>
<tr>
<td>Country</td>
<td><input type="text" name="country" id="country"></td>
<td id="cnt-inc">First letter should be capital</td>
</tr>
<tr>
<td>Gender</td>
<td>
<input type="radio" id="male" name="gender" value="male">
<label for="male">Male</label><br>
<input type="radio" id="female" name="gender" value="female">
<label for="female">Female</label><br>
<input type="radio" id="other" name="gender" value="other">
<label for="other">Unknown</label>
</td>
<td id="gen-inc"></td>
</tr>
<tr>
<td>Meal Preference</td>
<td>
```

```

        <input type="checkbox" id="low-cal" name="low-cal" value="Low
Calorie">

        <label for="low-cal"> Low Calorie</label><br>
        <input type="checkbox" id="low-salt" name="low-salt" value="Low
Salt">

        <label for="low-salt"> Low Salt</label><br>
    </td>
    <td id="meal-pref"></td>
</tr>
<tr>
    <td></td>
    <td>
        <input type="checkbox" id="terms" name="terms" value="Terms">
        <label for="terms"> I Accept Terms</label><br>
    </td>
    <td id="terms-inc"></td>
</tr>
<tr>
    <td></td>
    <td><input type="submit" id="register" value="Register"></td>
</tr>
</table>
</form>
</body>

</html>

```

## JAVASCRIPT

```

document.getElementById("register").onclick = function () {
    var form = document.getElementById("q2");
    var fn = document.getElementById("full-name");
    var email = document.getElementById("email");
    var pwd = document.getElementById("pwd");
    var dob = document.getElementById("dob");
    var cnt = document.getElementById("country");
    var gender = document.querySelectorAll('input[name="gender"]');
    var meal1 = document.getElementById("low-cal");
    var meal2 = document.getElementById("low-salt");
    var terms = document.getElementById("terms");

```

```
var total = 0;
var reg = /^[A_Z][a-z]*,\s[A_Z][a-z]*$/
if (!(fn.value.match(reg))) {
    document.getElementById("fn-inc").innerHTML += ": PLEASE ENTER IN CORRECT
FORMAT";
    total = 1;
}

reg = /^[^\s@]+@[^\s@]+\.[^\s@]+$/;
if (!(email.value.match(reg))) {
    document.getElementById("em-inc").innerHTML += ": PLEASE ENTER IN CORRECT
FORMAT";
    total = 1;
}

reg = /[A-Za-z0-9@!]/
if (!pwd.value.match(reg)) {
    document.getElementById("em-inc").innerHTML += ": PLEASE ENTER IN CORRECT
FORMAT";
    total = 1;
}

reg = /^\d{1,2}\/\d{1,2}\/\d{4}$/;
if (!dob.value.match(reg)) {
    document.getElementById("dob-inc").innerHTML += ": PLEASE ENTER IN CORRECT
FORMAT";
    total = 1;
}

reg = /^[A-Z]/;
if (!cnt.value.match(reg)) {
    document.getElementById("cnt-inc").innerHTML += ": PLEASE ENTER IN CORRECT
FORMAT";
    total = 1;
}

var flag = 0;
for (var i = 0; i < gender.length; i++) {
    if (gender[i].checked)
        flag = 1;
```

```
    }  
    if (flag === 0) {  
        document.getElementById("gen-inc").innerHTML += ": PLEASE CHECK SOMETHING";  
        total = 1;  
    }  
  
    flag = 0;  
    if (meal1.checked || meal2.checked)  
        flag = 1;  
  
    if (flag === 0) {  
        document.getElementById("meal-pref").innerHTML += ": PLEASE CHECK  
SOMETHING";  
        total = 1;  
    }  
  
    if (!terms.checked) {  
        document.getElementById("terms-inc").innerHTML += ": PLEASE CHECK  
SOMETHING";  
        total = 1;  
    }  
  
    if (total) {  
        form.reset();  
    }  
  
}
```

Output:

Full Name  Format: FirstName, LastName

Email

Password  Only a-z A-Z 0-9 @ ! allowed

Date of Birth  mm/dd/yyyy

Country  First letter should be capital

Gender

☐ Male

☐ Female

☐ Unknown

Meal Preference

☐ Low Calorie

☐ Low Salt

☐ I Accept Terms