



VIT[®]

Vellore Institute of Technology

(Deemed to be University under section 3 of UGC Act, 1956)

School of Information Technology and Engineering
Digital Assessment - II, FEB 2019
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|-------------|-------------------|
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| REG. NO. | 18BIT0272 |
| COURSE CODE | ITE1002 |
| COURSE NAME | WEB TECHNOLOGIES |
| SLOT | B2 |
| FACULTY | Prof. PUVIARASI G |

Question 2:

Let's check if you are on a roller coaster. You are on a roller coaster, if your alphabets in your name ascends and descends regularly

Write a JavaScript function **validateName()** that validates the name entered in the text field. The name should contain only alphabets and white spaces. The upper case and lower case are treated in the same manner. The validated name is used by the JavaScript function **rollerCoaster()**. The function checks if the adjacent characters ascends and descends.

i/p

Anand

o/p

Anand is on roller coaster

A precedes n

n succeeds a

a precedes n

n succeeds d

i/p

Amirtha

A precedes m

m succeeds i

i precedes r

r precedes t

o/p – Amirtha is half way through roller coaster

i/p
Amu (total ascender)
O/P – Amu is high on roller coaster
i/p
mia (descender)
o/p – mia doesn't like the roller coaster

HTML CODE:

```
<!DOCTYPE html>
<html>
<head meta charset = "utf-8">
<title>DA2</title>
<style>
#m1 {
  background-color: #C12283;
  color: white;
}
#m2 {
  background-color: white;
  color: black;
}
#m3 {
  background-color: white;
  color: red;
}
</style>
<script type="text/javascript">
function validateName()
{
  name = document.getElementById("i").value;
  var nm = name.toLowerCase();
  var re = /^[a-z ]*$/;
  if(re.test(nm))
    rolCos(nm,name);
  else
    alert("Invalid Name");
}
function rolCos(s,name)
{
  var arr = Array.from(s);
```

```
a=[];
var i=0,res;
for(i=0 ; i < arr.length ;i++)
{
if(i==0)
a.push(1);
else{
if(arr[i-1]>arr[i])
a.push(0);
else
a.push(1);
}
}
var c0=0,c1=0;
if(a.length > 1)
{
for(i=1;i<a.length;i++)
{
if(a[i]==1)
c1 += 1;
else
c0 += 1;
}
if(c0 == c1)
res = name + " is on roller coaster";
else if(c0 == 0)
res = name + " is high on roller coaster";
else if(c1 == 0)
res = name + " doesn't like the roller coaster";
else
res = name + " is half way through roller coaster";
}
else
res = "Cannot be check with only one alphabet";
document.getElementById("m3").innerHTML = res;
}
</script>
</head>
<body bgcolor="#FAAFBA"><center><b><h1><mark id="m1">Let's see if your
name is on a Roller Coaster!</mark></h1><br><br>
```

```
<h2><mark id="m2">Enter Name:</mark><br><input type="text"
id="i"></input></br>
<button onclick="validateName();">Check</button><br><br>
<mark id="m3"></mark>
</h2></b></center>
</body>
</html>
```

OUTPUT SCREEN:








