

JavaScript Application For calculating CGPA For University Result.

Aim:-

To write the JavaScript Application for calculating CGPA for University Result.

Algorithm:-

Step 1 : Start

Step 2 : Open the notepad, start Javascript using html tags by giving `<!DOCTYPE html>`

Step 3 : After, use various html tags such as `<html>`, `<head>`, `<title>` then close the tags.

Step 4 : Then give `<script language="javascript" type="text/javascript">`

Step 5 : Then declare and define a function `calculate()`

Step 6 : Then declare variables such as `var credit`, `var gradepoint`, `var mark`, `var cgpa` etc.,

Step 7 : Then get value from user using `document.cgpa.txt1.value`.

Step 8 : Then bring if-else conditions and for loops for execution.

Step 9 : Then declare a "form" name and create the input type for getting the values and close the form by closing the form tag.

Step 10 : Stop.

Program :-

```
<!DOCTYPE html>
<html>
<head>
<script language="javascript" type="text/javascript">
function calculate()
{
var credit = [3,3,3,3,4,2,2,2,2];
var gradepoint = [];
var grade = [];
var mark = [];
var cgpa;
var p=0;
var s=0;
var i;
mark[1] = document.cgpa.txt1.value;
mark[2] = document.cgpa.txt2.value;
mark[3] = document.cgpa.txt3.value;
mark[4] = document.cgpa.txt4.value;
mark[5] = document.cgpa.txt5.value;
mark[6] = document.cgpa.txt6.value;
mark[7] = document.cgpa.txt7.value;
mark[8] = document.cgpa.txt8.value;
for(i=1; i<=8; i++)
{
if(mark[i]>90)
```

{

gradepoint[i] = 10 ;

grade[i] = "O" ;

{

else if(mark[i] > 80)

{

gradepoint[i] = 9 ;

grade[i] = "A+" ;

{

else if(mark[i] > 70)

{

gradepoint[i] = 8 ;

grade[i] = "A" ;

{

else if(mark[i] > 60)

{

gradepoint[i] = 7 ;

grade[i] = "B+" ;

{

else if(mark[i] > 50)

{

gradepoint[i] = 6 ;

grade[i] = "B" ;

{

else

{

```
gradepoint[i] = 0;
```

```
grade[i] = "U";
```

3

3

```
for(i=1; i<=8; i++)
```

S

```
p = p + credit[i] * gradepoint[i];
```

```
s = s + credit[i];
```

3

```
cgpa = p/s;
```

```
alert("CGPA = " + cgpa);
```

3

```
</script>
```

```
<title> CGPA </title>
```

```
</head>
```

```
<body bgcolor="pink">
```

```
<form name="cgpa">
```

```
<center>
```

```
<font face="Time New Roman" size=+5 color="blue">
```

```
<b><u> CGPA CALCULATOR </u></b></font><br><p></center>
```

```
(MC5301) : <input type="text" name="txt1"/><p>
```

```
(MC5302) : <input type="text" name="txt2"/><p>
```

```
(MC5303) : <input type="text" name="txt3"/><p>
```

```
(MC5304) : <input type="text" name="txt4"/><p>
```

```
(MC5305) : <input type="text" name="txt5"/><p>
```

```
(MC5311) : <input type="text" name="txt6"/><p>
```

(MC5312) : <input type = "text" name = "txt7" /><p>
(MC5313) : <input type = "text" name = "txt8" /><p>
<input type = "button" name = "btnCal" value = "calculate" onclick =
"calculate(); ">
</form>
</body>
</html>

Result:-

Thus the Javascript Application for calculating CGPA for university
Result has been executed successfully.

Output:-

CGPA CALCULATOR

(MC5301) : 100

(MC5302) : 90

(MC5303) : 80

(MC5304) : 70

(MC5305) : 90

(MC5311) : 60

(MC5312) : 90

(MC5313) : 100

calculate

This page says

CGPA = 8.428571428571429

OK