

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 grade point`, `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  
{
```



```
grade point [i] = 0;
```

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

```
}
```

```
}
```

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

```
{
```

```
p = p + credit [i] * grade point [i];
```

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

```
}
```

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

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

```
}
```

```
</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