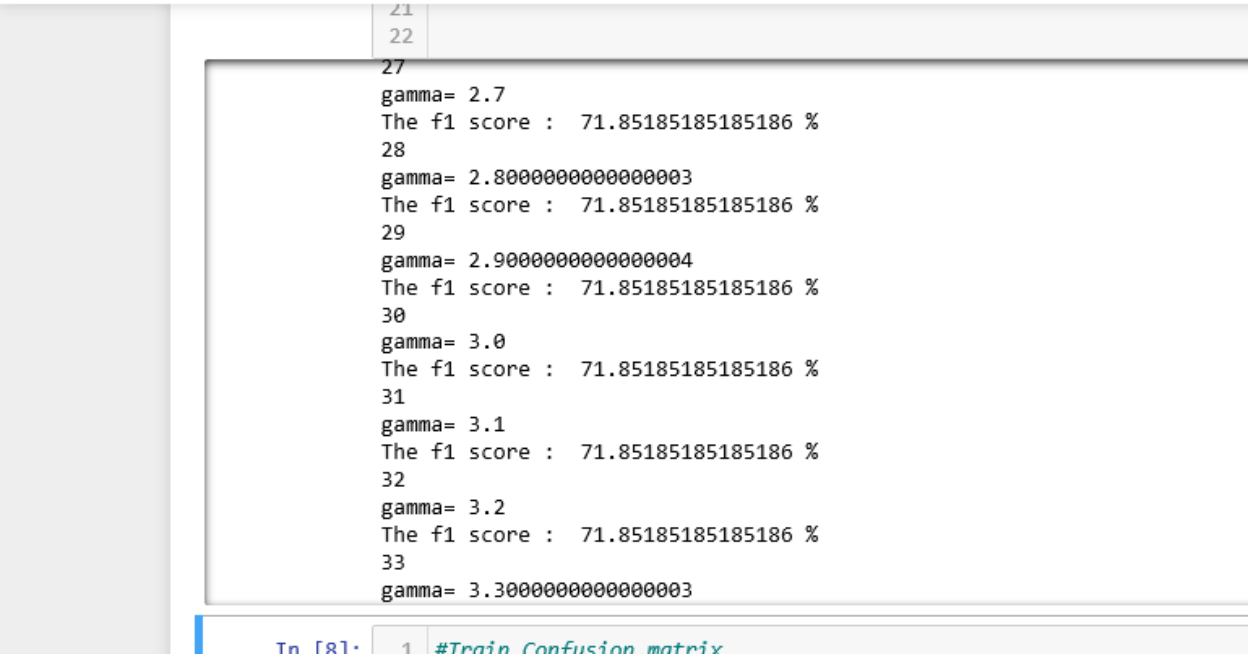
Programming Assignment 2
Support Vector Machines (SVMs)

Our goal must be to find the best C value for the linear classifier :
I made a loop from 1-100 and C values was incrassating by the time but f1 score remain `71.85185185185186 %  all the time .`

```
The f1 score :  71.85185185185186 %
1
C= 1
The f1 score :  71.85185185185186 %
2
C= 6
The f1 score :  71.85185185185186 %
3
C= 11
The f1 score :  71.85185185185186 %
4
C= 16
The f1 score :  71.85185185185186 %
5
C= 21
The f1 score :  71.85185185185186 %
6
C= 26
The f1 score :  71.85185185185186 %
7
C= 31
The f1 score :  71.85185185185186 %
8
C= 36
The f1 score :  71.85185185185186 %
9
C= 41
The f1 score :  71.85185185185186 %
10
C= 46
The f1 score :  71.85185185185186 %
11
```

I made a loop from 1-100 and C & gamma values was incrassating by the time but f1 score remain `71.85185185185186 %  all the time .`



```
21
22
27
gamma= 2.7
The f1 score :  71.85185185185186 %
28
gamma= 2.8000000000000003
The f1 score :  71.85185185185186 %
29
gamma= 2.9000000000000004
The f1 score :  71.85185185185186 %
30
gamma= 3.0
The f1 score :  71.85185185185186 %
31
gamma= 3.1
The f1 score :  71.85185185185186 %
32
gamma= 3.2
The f1 score :  71.85185185185186 %
33
gamma= 3.3000000000000003
```

```
In [8]:  1  #Train Confusion matrix
```