```
In [19]: # Nama : Ranti indriyani
           # Kelas: TI22C
           # NIM : 20220040002
In [32]: import matplotlib.pyplot as plt
           import pandas as pd
In [33]: # A
           df = pd.read_csv("D:\\UAS_DPP.csv")
           df
Out[33]:
                Student Numeber Name
                                                 Subject Grade
             0
                                  Andri Programming Basic
                                                             80
                            101
             1
                            102
                                  Budi Programming Basic
                                                             90
                            103
                                  Cika Programming Basic
                                                            100
                            104
                                  Dedi Programming Basic
                                                            100
                            105
                                   Eka Programming Basic
                                                             50
                            106
                                   Feri
                                        Programming Basic
                                                             40
                            107
                                  Galih Programming Basic
                                                             70
                            108
                                  Huda
                                        Programming Basic
                                                             70
                            109
                                  Intan
                                        Programming Basic
                                                             60
                            101
                                         Web Programming
                                                             70
            10
                            102
                                  Budi
                                         Web Programming
                                                             80
                                         Web Programming
            11
                            103
                                  Cika
                                                             80
                                         Web Programming
            12
                            104
                                  Dedi
                                                             90
                                   Eka
                                         Web Programming
            13
                            105
                                                             90
                                   Feri
            14
                            106
                                         Web Programming
                                                             60
            15
                            107
                                                             95
                                  Galih
                                         Web Programming
            16
                            108
                                         Web Programming
                                  Huda
                                                             85
                                         Web Programming
            17
                            109
                                  Intan
                                                             90
In [34]: # B
           df.loc[(df['Grade'] >=70),'Description'] = 'pass'
df.loc[(df['Grade'] < 70),'Description'] = 'fail'</pre>
           df
Out[34]:
```

	Student Numeber	Name	Subject	Grade	Description
(101	Andri	Programming Basic	80	pass
1	102	Budi	Programming Basic	90	pass
2	103	Cika	Programming Basic	100	pass
3	104	Dedi	Programming Basic	100	pass
4	105	Eka	Programming Basic	50	fail
ŧ	106	Feri	Programming Basic	40	fail
•	107	Galih	Programming Basic	70	pass
7	108	Huda	Programming Basic	70	pass
8	109	Intan	Programming Basic	60	fail
9	101	Andri	Web Programming	70	pass
10	102	Budi	Web Programming	80	pass
11	103	Cika	Web Programming	80	pass
12	! 104	Dedi	Web Programming	90	pass
13	105	Eka	Web Programming	90	pass
14	106	Feri	Web Programming	60	fail
15	107	Galih	Web Programming	95	pass
16	108	Huda	Web Programming	85	pass
17	109	Intan	Web Programming	90	pass

```
In [37]: #b
df ['rata-rata'] = df['Grade'].mean()
df
```

Out[37]:

	Student Numeber	Name	Subject	Grade	Description	rata-rata
0	101	Andri	Programming Basic	80	pass	77.777778
1	102	Budi	Programming Basic	90	pass	77.777778
2	103	Cika	Programming Basic	100	pass	77.777778
3	104	Dedi	Programming Basic	100	pass	77.777778
4	105	Eka	Programming Basic	50	fail	77.777778
5	106	Feri	Programming Basic	40	fail	77.777778
6	107	Galih	Programming Basic	70	pass	77.777778
7	108	Huda	Programming Basic	70	pass	77.777778
8	109	Intan	Programming Basic	60	fail	77.777778
9	101	Andri	Web Programming	70	pass	77.777778
10	102	Budi	Web Programming	80	pass	77.777778
11	103	Cika	Web Programming	80	pass	77.777778
12	104	Dedi	Web Programming	90	pass	77.777778
13	105	Eka	Web Programming	90	pass	77.777778
14	106	Feri	Web Programming	60	fail	77.777778
15	107	Galih	Web Programming	95	pass	77.777778
16	108	Huda	Web Programming	85	pass	77.777778
17	109	Intan	Web Programming	90	pass	77.777778

```
In [43]: # B
    df['rata-rata'] = df['Grade'].mean()
    fl1 = df[['Student Numeber','Name','rata-rata']]
    fl1
```

Out[43]:

	Student Numeber	Name	rata-rata
0	101	Andri	77.77778
1	102	Budi	77.777778
2	103	Cika	77.77778
3	104	Dedi	77.77778
4	105	Eka	77.777778
5	106	Feri	77.77778
6	107	Galih	77.77778
7	108	Huda	77.777778
8	109	Intan	77.77778
9	101	Andri	77.77778
10	102	Budi	77.777778
11	103	Cika	77.777778
12	104	Dedi	77.777778
13	105	Eka	77.777778
14	106	Feri	77.777778
15	107	Galih	77.777778
16	108	Huda	77.777778
17	109	Intan	77.77778

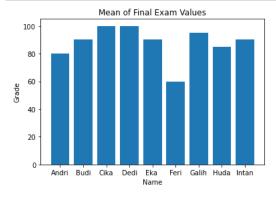
```
In [44]: # B
    df ['rata-rata'] = df['Grade'].mean()
    df
```

Out[44]:

	Student Numeber	Name	Subject	Grade	Description	rata-rata
0	101	Andri	Programming Basic	80	pass	77.777778
1	102	Budi	Programming Basic	90	pass	77.777778
2	103	Cika	Programming Basic	100	pass	77.77778
3	104	Dedi	Programming Basic	100	pass	77.77778
4	105	Eka	Programming Basic	50	fail	77.77778
5	106	Feri	Programming Basic	40	fail	77.77778
6	107	Galih	Programming Basic	70	pass	77.77778
7	108	Huda	Programming Basic	70	pass	77.77778
8	109	Intan	Programming Basic	60	fail	77.77778
9	101	Andri	Web Programming	70	pass	77.77778
10	102	Budi	Web Programming	80	pass	77.77778
11	103	Cika	Web Programming	80	pass	77.77778
12	104	Dedi	Web Programming	90	pass	77.77778
13	105	Eka	Web Programming	90	pass	77.77778
14	106	Feri	Web Programming	60	fail	77.77778
15	107	Galih	Web Programming	95	pass	77.77778
16	108	Huda	Web Programming	85	pass	77.77778
17	109	Intan	Web Programming	90	pass	77.77778

```
In [45]: # C
    x = df['Name']
    y = df['Grade']

plt.bar(x,y)
    plt.title('Mean of Final Exam Values')
    plt.xlabel('Name')
    plt.ylabel('Grade')
    plt.show()
```



In []: