In [1]:
```python
import matplotlib.pyplot as pyplot
import pandas
import csv


# No 1
list_siswa = []
with open('DataSiswa.csv') as item:
    reader = csv.DictReader(item)
    for row in reader:
        if int(row['Grade']) > 80:
            list_siswa.append(row)
print("********** List Disctonary Siswa Who Have Grade > 80 **********")
print(list_siswa)
print("")


# No 2
listSiswa = pandas.read_csv('DataSiswa.csv')

# a
listSiswa = listSiswa.assign( Description = '' )
listSiswa.loc[ (listSiswa['Grade'] >= 70), 'Description' ] = 'PASS'
listSiswa.loc[ (listSiswa['Grade'] < 70), 'Description' ] = 'FAIL'
print("**********  List Siswa With Description  **********")
print(listSiswa)
print("")

# b & c
data_group = listSiswa.groupby('Name')[ [ 'Grade'] ].mean().astype(int)
data_group.plot(kind='bar')
pyplot.xlabel('Name')
pyplot.ylabel('Grade)')
pyplot.title('Mean of Final Exam Values')
pyplot.show()
```
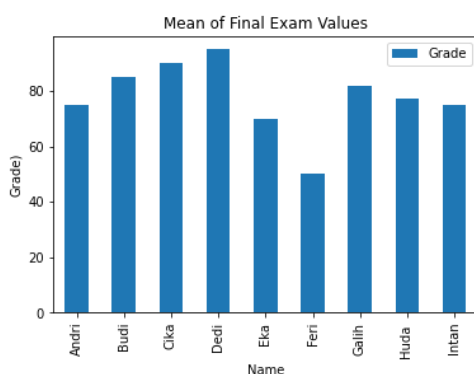
```
********** List Disctonary Siswa Who Have Grade > 80 **********
[{'Student Number': '102', 'Name': 'Budi', 'Subject': 'Programming Basic', 'Grade': '90'}, {'Student Number': '103', 'Name':
'Cika', 'Subject': 'Programming Basic', 'Grade': '100'}, {'Student Number': '104', 'Name': 'Dedi', 'Subject': 'Programming Ba
sic', 'Grade': '100'}, {'Student Number': '104', 'Name': 'Dedi', 'Subject': 'Web Programming', 'Grade': '90'}, {'Student Numb
er': '105', 'Name': 'Eka', 'Subject': 'Web Programming', 'Grade': '90'}, {'Student Number': '107', 'Name': 'Galih', 'Subjec
t': 'Web Programming', 'Grade': '95'}, {'Student Number': '108', 'Name': 'Huda ', 'Subject': 'Web Programming', 'Grade': '8
5'}, {'Student Number': '109', 'Name': 'Intan', 'Subject': 'Web Programming', 'Grade': '90'}]

**********  List Siswa With Description  **********
    Student Number    Name          Subject  Grade Description
0              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
5              106    Feri  Programming Basic     40       FAIL
6              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 [ ]: