

# Python program to implement One-Way f-test

```
In [1]: #Name : Rajshri Kirandas Satpute
        #Year : 3rd year
        #Section : B
        #Roll No : 55
        #Date : 05/03/2024
```

```
In [2]: # Importing the required libraries
import scipy.stats
```

```
In [3]: # Creating sample data
data1 = [0.0842, 0.0368, 0.0847, 0.0935, 0.0376, 0.0963, 0.0684,
0.0758, 0.0854, 0.0855]
data2 = [0.0785, 0.0845, 0.0758, 0.0853, 0.0946, 0.0785, 0.0853,
0.0685]
data3 = [0.0864, 0.2522, 0.0894, 0.2724, 0.0853, 0.1367, 0.853]
```

```
In [4]: # Performing the F-Test
f_test, p_val = scipy.stats.f_oneway(data1, data2, data3)
print("p-value is: ", p_val)
```

p-value is: 0.04043792126789144

```
In [5]: # taking the threshold value as 0.05 or 5%
if p_val < 0.05:
    print(" We can reject the null hypothesis")
else:
    print("We can accept the null hypothesis")
```

We can reject the null hypothesis

```
In [ ]:
```