## Python NPTEL Programs

Saturday, August 25, 2018 6:31 PM

```
# -*- coding: utf-8 -*-
Created on Wed Aug 8 10:20:52 2018
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#Week2-first disount
#=========
"""c=input("enter the cost\n")
d=int(c)
answer = d*0.9
print(answer)"""
#While condition
#========
'''n=1
c=1
while(c==1):
  print("Token number",n,"may please come in")
 c=int(input("continue?(0/1)"))
  n=n+116
print("Thanks you this is the end of the day")"
#=====
#List
#=====
"shopping = ["Bread", "coffee", "Sugar"]
print(shopping)
for item in shopping:
  print(item)
#=======
#append
#=======
shopping.append("Curd")
print(shopping)
print(shopping[1])
for i in range(3):
  print(shopping[i])
shopping.insert(1,"oil")
print(shopping)
#+++++++++++++
#Count the number of occurence
```

```
ages = [12,23,42,35,12,23,56,78,42,57,70,3,23,43,57,56]
print(ages.count(23))
#==========
#count of element in a list - using length
print(len(ages))
print(len(shopping))
for i in range(len(shopping)):
 print(shopping[i])
#To get distinct value from a list
a = set(ages)
print(a)
#sorting from a list
#===========
#ages.sort()
#print(ages)
ages.reverse()
print(ages)"
#slicing
#list name[start index:end index+1]
"students = ["Arun","Avinash","Ragavan","Aravind","Bibhu","Priyanka","Amulya","Kiran","shubham"]
students.sort()
import numpy as np
ages = [12,23,42,35,12,23,56,78,42,57,70,3,23,43,57,56]
ages_1 = np.sort(ages)
print(ages_1)
j = students[0:5]
print(j)
print(len(students))'''
# Crowde computing
```

```
"import statistics
#from statistics import mean
Estimates = [1111,342,454,567,750,120,234,561,324,1050,1500,100,180,1000,150,250]
Estimates.sort()
print(Estimates)
tv = int(0.1 * len(Estimates))
Estimates = Estimates[tv:]
Estimates = Estimates[:len(Estimates)-tv]
print(Estimates)
#print(mean(Estimates))
print(statistics.mean(Estimates))'''
##Another way to do above program
"import statistics
#from scipy import stats
import scipy
Estimates = [1111,342,454,567,750,120,234,561,324,1050,1500,100,180,1000,150,250]
Estimates.sort()
#m = stats.trim mean(Estimates, 0.1)
m = scipy.stats.trim_mean(Estimates,0.1)
print(m)"
```