

Assignment 3

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Batch: E2

```
import numpy as np
array3 = np.loadtxt("/content/testmarks1.csv", delimiter=',',
dtype=str, skiprows= 1)
print(array3)
EDS = []
SON = []
DT = []
ET = []
for i in array3:
    EDS.append(float(i[1]))
    SON.append(float(i[2]))
    DT.append(float(i[3]))
    ET.append(float(i[4]))

print("\n\n",EDS)
print("\n",SON)
print("\n",DT)
print("\n",ET)
#Converting list to array
arr_EDS=np.array(EDS)
arr_SON=np.array(SON)
arr_DT=np.array(DT)
arr_ET=np.array(ET)
```

Output:

```
[['801' '43.05' '27.79' '28.7' '27.79']
['802' '43.47' '28.52' '28.98' '27.89']
['803' '42.24' '28.16' '28.16' '25.63']
['804' '39.24' '26.16' '26.16' '26.16']
['805' '40.9' '26.03' '27.27' '25.65']
['806' '39.47' '26.31' '26.31' '25.21']
['807' '41.68' '25.63' '27.79' '25.46']
['808' '42.19' '27.61' '28.13' '26.21']
['809' '44.75' '28.35' '29.83' '28.21']
['810' '46.95' '28.88' '31.3' '28.53']]
```

```
[43.05, 43.47, 42.24, 39.24, 40.9, 39.47, 41.68, 42.19,
44.75, 46.95]
```

```
[27.79, 28.52, 28.16, 26.16, 26.03, 26.31, 25.63, 27.61,
28.35, 28.88]
[28.7, 28.98, 28.16, 26.16, 27.27, 26.31, 27.79, 28.13,
29.83, 31.3]
[27.79, 27.89, 25.63, 26.16, 25.65, 25.21, 25.46, 26.21,
28.21, 28.53]
```

```
m=max(EDS)
mi=min(SON)
EDSarr=np.array(EDS)
SONarr=np.array(SON)
DTarr=np.array(DT)
ETarr=np.array(ET)
std=np.std(DTarr)
med=np.median(ETarr)
var=np.var(EDSarr)
mean=np.mean(SONarr)
sort=np.sort(DTarr)
search = np.where(SONarr == 26.16)
print(DT)
print("\nThe min of son",mi)
print("\nThe max of eds",m)
print("\nThe std of Dtarr",std)
print("\nThe med of Etarr",med)
print("\nThe var of Edsarr",var)
print("\nThe mean ofsonarr ",mean)
print("\nThe sortedc arr of Dtarr ",sort)
print("\nThe search arr of sonarr ",search)
```

Output:

```
[28.7, 28.98, 28.16, 26.16, 27.27, 26.31, 27.79, 28.13, 29.83,
31.3]
```

```
The min of son 25.63
The max of eds 46.95
The std of Dtarr 1.4784725225718605
The med of Etarr 26.185000000000002
The var of Edsarr 4.9200640000000002
The mean ofsonarr 27.344
The sortedc arr of Dtarr [26.16 26.31 27.27 27.79 28.13 28.16
28.7 28.98 29.83 31.3 ]
The search arr of sonarr (array([3]),)
```