

Importing necessary modules

In [1]:

```
import numpy as np
from numpy import genfromtxt
```

Task1: To import dataset and find average of age column

In [2]:

```
emp_data = genfromtxt(r"K:\Desktop\DS1_C4_S1_Datafile\DS1_C4_S1_Datafile\DS1_C4_S1_Employee_Data_Challenge.csv", delimiter=',', dtype=int, skip_header=1)
cust_data=genfromtxt(r"K:\Desktop\DS1_C4_S1_Datafile\DS1_C4_S1_Datafile\DS1_C4_S1_Shopping_Data_Challenge.csv", delimiter=",", dtype=int, skip_header=1)

print("The average of age of employees = ", np.mean(emp_data[:,1]))
```

The average of age of employees = 28.26

Task2: To identify employees who are more than 25yrs along with emp_code

In [11]:

```
print("Total Employees who are more than 25 years old and thier employee_codes = ", len(emp_data[np.where(emp_data[:,1]>25)]))
print(emp_data[np.where(emp_data[:,1]>25)])
```

Total Employees who are more than 25 years old and thier employee_codes = 38

```
[[ 2 27]
 [ 3 31]
 [ 4 29]
 [ 5 27]
 [ 6 26]
 [ 7 27]
 [ 9 27]
[10 32]
[11 28]
[12 27]
[14 27]
[15 35]
[16 33]
[17 28]
[20 27]
[21 37]
[22 27]
[24 27]
[25 28]
[26 26]
[27 27]
[28 27]
[29 29]
[30 49]
[31 26]
[32 32]
[33 26]
[37 28]
[38 28]
[40 26]
[41 32]
[42 35]
[43 33]
[44 31]
[45 30]
[46 36]
[49 32]
[50 34]]
```

Task3: To identify employees with more than 30 and less than 35 years of age along with employee_code

In [10]:

```
print(emp_data[np.where((emp_data[:,1] > 30) & (emp_data[:,1] < 35))])
print()
print("Total number of employees of -> ",len(emp_data[np.where((emp_data[:,1] > 30) & (emp_data[:,1] < 35))]))
```

```
[[ 3 31]
 [10 32]
 [16 33]
 [32 32]
 [41 32]
 [43 33]
 [44 31]
 [49 32]
 [50 34]]
```

Total number of employees of -> 9

Task4 : To identify customers who have spending score more than 80 and display thier scores

In [13]:

```
print("Total number of customers having more than 80 =",len(cust_data[np.where(cust_data[:,3]>80)]))
cust_data[np.where(cust_data[:,3]>80)]
```

Total number of customers having more than 80 = 30

Out[13]:

```
array([[ 2, 21, 15, 81],
 [ 8, 23, 18, 94],
 [12, 35, 19, 99],
 [20, 35, 23, 98],
 [26, 29, 28, 82],
 [30, 23, 29, 87],
 [34, 18, 33, 92],
 [36, 21, 33, 81],
 [42, 24, 38, 92],
 [124, 39, 69, 91],
 [128, 40, 71, 95],
 [136, 29, 73, 88],
 [142, 32, 75, 93],
 [144, 32, 76, 87],
 [146, 28, 77, 97],
 [150, 34, 78, 90],
 [152, 39, 78, 88],
 [156, 27, 78, 89],
 [162, 29, 79, 83],
 [164, 31, 81, 93],
 [168, 33, 86, 95],
 [174, 36, 87, 92],
 [176, 30, 88, 86],
 [180, 35, 93, 90],
 [182, 32, 97, 86],
 [184, 29, 98, 88],
 [186, 30, 99, 97],
 [190, 36, 103, 85],
 [194, 38, 113, 91],
 [200, 30, 137, 83]])
```

Task5: To identify customers who are in age group 20 to 25

In [6]:

```
print(cust_data[(np.where((cust_data[:,1] >=20) & (cust_data[:,1] < 25))))])
```

```
[[ 2  21  15  81]
 [ 3  20  16   6]
 [ 4  23  16  77]
 [ 6  22  17  76]
 [ 8  23  18  94]
 [14  24  20  77]
 [16  22  20  79]
 [18  20  21  66]
 [30  23  29  87]
 [32  21  30  73]
 [36  21  33  81]
 [40  20  37  75]
 [42  24  38  92]
 [46  24  39  65]
 [79  23  54  52]
 [85  21  54  57]
 [88  22  57  55]
 [96  24  60  52]
[100  20  61  49]
[101  23  62  41]
[106  21  62  42]
[125  23  70  29]
[135  20  73   5]]
```