

Task 1 :-

Read the data from employee data file and find the average age of all the employees

In [2]:

```
import numpy as np
from numpy import genfromtxt

emp_code = genfromtxt(r'E:\Aishwarya official\Aishwarya Data Scince\Course 4\DS1_C4_S1_Datafile\DS1_C4_S1_Employee_Data_Challenge.csv',
                      delimiter=',', dtype=int, skip_header=1)

emp_code
```

Out[2]:

```
array([[ 1, 22],
       [ 2, 27],
       [ 3, 31],
       [ 4, 29],
       [ 5, 27],
       [ 6, 26],
       [ 7, 27],
       [ 8, 23],
       [ 9, 27],
       [10, 32],
       [11, 28],
       [12, 27],
       [13, 22],
       [14, 27],
       [15, 35],
       [16, 33],
       [17, 28],
       [18, 22],
       [19, 25],
       [20, 27],
       [21, 37],
       [22, 27],
       [23, 24],
       [24, 27],
       [25, 28],
       [26, 26],
       [27, 27],
       [28, 27],
       [29, 29],
       [30, 49],
       [31, 26],
       [32, 32],
       [33, 26],
       [34, 24],
       [35, 24],
       [36, 23],
       [37, 28],
       [38, 28],
       [39, 22],
       [40, 26],
       [41, 32],
       [42, 35],
       [43, 33],
       [44, 31],
       [45, 30],
       [46, 36],
       [47, 22],
       [48, 23],
       [49, 32],
       [50, 34]])
```

In [6]:

```
avg_age = np.mean(emp_code[:,1])
avg_age
```

Out[6]:

28.26

Task 3:-

To identify employees with more 30 and less than 35 years of age along with employees_code

In [3]:

```
Age2 = np.where((emp_code[:,1]>30) & (emp_code[:,1]<35))
print(emp_code[Age2])
```

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

In []:

Task 2:-

Fetch the rows corresponding to ages between 20 and 24

In [24]:

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

```
[[ 1 22]
 [ 8 23]
 [13 22]
 [18 22]
 [19 25]
 [23 24]
 [34 24]
 [35 24]
 [36 23]
 [39 22]
 [47 22]
 [48 23]]
```

Task 3 :-

customers IDs of those who have the lowest annual and highest income .

In [25]:

```
import numpy as np
from numpy import genfromtxt

shopping = genfromtxt(r'E:\Aishwarya official\Aishwarya Data Scince\Course 4\DS1_C4_S1_Datafile\DS1_C4_S1_Shopping_Data_Challenge.csv',
                      delimiter=',', dtype=int, skip_header=1)

shopping
```

Out[25]:

```
array([[ 1, 19, 15, 39],
       [ 2, 21, 15, 81],
       [ 3, 20, 16,  6],
       [ 4, 23, 16, 77],
       [ 5, 31, 17, 40],
       [ 6, 22, 17, 76],
       [ 7, 35, 18,  6],
       [ 8, 23, 18, 94],
       [ 9, 64, 19,  3],
       [10, 30, 19, 72],
       [11, 67, 19, 14],
       [12, 35, 19, 99],
       [13, 58, 20, 15],
       [14, 24, 20, 77],
       [15, 37, 20, 13],
       [16, 22, 20, 79],
       [17, 35, 21, 35],
       [18, 20, 21, 66]]
```

In [34]:

```

minimum = np.min(shopping[:,2])
print(shopping[minimum])
maximum = np.max(shopping[:,2])
print(shopping[maximum])

```

```

[16 22 20 79]
[138 32 73 73]

```

Task 4 :-

spending score is more than 75

In [39]:

```

Discount = np.where(shopping[:,3]>75)
print(shopping[Discount])

```

```

[[ 2 21 15 81]
 [ 4 23 16 77]
 [ 6 22 17 76]
 [ 8 23 18 94]
 [12 35 19 99]
 [14 24 20 77]
 [16 22 20 79]
 [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]
[126 31 70 77]
[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]
[154 38 78 76]
[156 27 78 89]
[158 30 78 78]
[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]
[196 35 120 79]
[200 30 137 83]]

```

Task 5 :- To identify employees with more 30 and less than 35 years of age along with employees_code

In [40]:

```

Age2 = np.where((emp_code[:,1]>30) & (emp_code[:,1]<35))
print(emp_code[Age2])

```

```

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

```

In []:

