Importing necessary modules

```
In [1]:

import numpy as np
import os
```

Task1:To allocate employee codes for respective departments

```
In [2]:

emp_code_hr=np.arange(1,501)
emp_code_finance=np.arange(501,1001)
emp_code_it=np.arange(1001,1501)
emp_code_sales=np.arange(1501,2001)
```

Task2: To generate salary of employees for corresponding departments

```
In [3]:

sal_hr=np.random.randint(25000,50000,500)
sal_finance=sal_hr*1.25
sal_sales=sal_finance*0.5
sal_it=sal_hr+5000
```

Task3: To identify department wise total cost to company

```
In [4]:

CTC_hr=np.sum(sal_hr)
CTC_finance=np.sum(sal_finance)
CTC_it=np.sum(sal_it)
CTC_sales=np.sum(sal_sales)
Highest_CTC=max(CTC_hr,CTC_finance,CTC_it,CTC_sales)
print("The highest CTC amongst the departments is of finance -> {0}".format(Highest_CTC))
```

The highest CTC amongst the departments is of finance -> 23559242.5

Task4: To identify top 10 salaries in HR and finance department

```
In [5]:
Top10_hr=np.sort(sal_hr)[501:489:-1]
Top10_finance=np.sort(sal_finance)[501:489:-1]
print("Top 10 salaries in HR-> ",Top10_hr)
print()
print("Top 10 salaries in finance-> ",Top10_finance)

Top 10 salaries in HR-> [49953 49836 49731 49611 49571 49556 49491 49478 49470 49460]

Top 10 salaries in finance-> [62441.25 62295. 62163.75 62013.75 61963.75 61945. 61863.75 61847.5 61837.5 61825. ]
```

Task5: To increment salaries of employees having more than 45K and count of employees who have more than 45k in sales and IT

```
In [6]:

sal_hr[np.where(sal_hr>45000)]=sal_hr[np.where(sal_hr>45000)]*1.1

sal_finance[np.where(sal_finance>45000)]=sal_finance[np.where(sal_finance>45000)]*1.1

sal_it[np.where(sal_it>45000)]=sal_it[np.where(sal_it>45000)]*1.1

sal_sales[np.where(sal_sales>45000)]=sal_sales[np.where(sal_sales>45000)]*1.1

print("Number of employees in sales with more than $45k is = ",len(np.where(sal_sales>45000)[0]))

print("Number of employees in IT with more than $45k is = ",len(np.where(sal_it>45000)[0]))

Number of employees in sales with more than $45k is = 0

Number of employees in IT with more than $45k is = 201
```

Task6: To increament salaries of employees having less than 45k

In [8]:

 $sal_sales[np.where(sal_sales<45000)] = sal_sales[np.where(sal_sales<45000)]*1.1$