## 1. Read Student Info File ¶

```
# Read File
In [2]:
                      file=open('stud info.csv','r')
                      info_dataset=[]
                      while True:
                                data=file.readline()
                                 if data:
                                           info_dataset.append(data.replace("\n", "").split(','))
                                 else:
                                           break
                      print(info_dataset)
                      [['Roll No', 'name', 'Gender', 'DOB'], ['1', 'John', 'Male', '05-04-1988'],
                      ['2', 'Mayur', 'Male', '04-05-1987'], ['3', 'Mangesh', 'Male', '25-05-1989'],
                      ['4', 'Jessica', 'Female', '12-08-1990'], ['5', 'Jennifer', 'Female', '02-09-
                      1989'], ['6', 'Ramesh', 'Male', '03-09-1989'], ['7', 'Suresh', 'Male', '04-09
                      -1990'], ['8', 'Ganesh', 'Male', '05-10-1989'], ['9', 'Komal', 'Female', '06-
                      09-1989'], ['10', 'Mayuri', 'Female', '07-02-1988']]
In [3]: RollNo=[]
                      Name=[]
                      Gender=[]
                      DOB=[]
In [4]: for row in info dataset[1:]:
                                 RollNo.append(row[0])
                                 Name.append(row[1])
                                 Gender.append(row[2])
                                 DOB.append(row[3])
In [5]: | print(RollNo)
                      print(Name)
                      print(Gender)
                      print(DOB)
                      ['1', '2', '3', '4', '5', '6', '7', '8', '9', '10']
                      ['John', 'Mayur', 'Mangesh', 'Jessica', 'Jennifer', 'Ramesh', 'Suresh', 'Gane
                      sh', 'Komal', 'Mayuri']
                      ['Male', 'Male', 'Female', 'Female', 'Male', 'Male', 'Male', 'Female', 'Male', 'Female', 'Male', 'Male', 'Female', 'Male', 'Male', 'Male', 'Female', 'Male', '
                      e', 'Female']
                      ['05-04-1988', '04-05-1987', '25-05-1989', '12-08-1990', '02-09-1989', '03-09
                      -1989', '04-09-1990', '05-10-1989', '06-09-1989', '07-02-1988']
```

## 2. Read Student Marks

```
In [6]:
        # Read Student Marks
         file=open('student marks.csv','r')
         marks dataset=[]
         while True:
             data=file.readline()
             if data:
                 marks_dataset.append(data.replace("\n", "").split(','))
             else:
                 break
         print(marks_dataset)
         [['Roll', 'Maths', 'Physics', 'Chemistry', 'Total', 'Percentage'], ['1', '5
         5', '45', '56', '156', '52.00'], ['2', '75', '55', '55', '185', '61.67'],
        ['3', '25', '54', '89', '168', '56.00'], ['4', '78', '55', '86', '219', '73.0
        0'], ['5', '58', '96', '78', '232', '77.33'], ['6', '88', '78', '58', '224',
         '74.67'], ['7', '56', '89', '69', '214', '71.33'], ['8', '54', '55', '88', '1
        97', '65.67'], ['9', '46', '66', '65', '177', '59.00'], ['10', '89', '87',
         4', '230', '76.67']]
In [7]:
         Maths=[]
         Physics=[]
         Chemistry=[]
         Total=[]
         Percentage=[]
        for row in marks dataset[1:]:
In [8]:
             Maths.append(row[1])
             Physics.append(row[2])
             Chemistry.append(row[3])
             Total.append(row[4])
             Percentage.append(row[5])
In [9]:
        print(Maths)
         print(Physics)
         print(Chemistry)
         print(Total)
         print(Percentage)
         ['55', '75', '25', '78', '58', '88', '56', '54', '46', '89']
['45', '55', '54', '55', '96', '78', '89', '55', '66', '87']
         ['56', '55', '89', '86', '78', '58', '69', '88', '65', '54']
         ['156', '185', '168', '219', '232', '224', '214', '197', '177', '230']
         ['52.00', '61.67', '56.00', '73.00', '77.33', '74.67', '71.33', '65.67', '59.
         00', '76.67']
```

## 3. Read Student Placement File

```
In [10]:
         # Read Student Marks
         file=open('stud placement.csv','r')
         placement dataset=[]
         while True:
             data=file.readline()
              if data:
                  placement_dataset.append(data.replace("\n", "").split(','))
             else:
                  break
         print(placement_dataset)
         [['Roll No', 'Company', 'JobRole', 'Package'], ['1', 'Infosys', 'Data Analys
         t', '10.2'], ['2', 'TCS', 'Java Developer', '9.6'], ['3', 'TCS', 'Data Scient
         ist', '12.60'], ['4', 'Infosys', 'Data Analyst', '10.2'], ['5', 'Oracle', 'Ja
         va Developer', '9.6'], ['6', 'Oracle', 'Data Scientist', '12.60'], ['7', 'TC
         S', 'Tester', '6.50'], ['8', 'Infosys', 'Tester', '6.51'], ['9', 'Mindtree',
         'Database Admin', '8.30'], ['10', 'Mindtree', 'Database Admin', '8.31']]
In [11]:
         Company=[]
         JobRole=[]
         Package=[]
In [12]: | for row in placement dataset[1:]:
              Company.append(row[1])
              JobRole.append(row[2])
              Package.append(row[3])
In [13]:
         print(Company)
         print(JobRole)
         print(Package)
         ['Infosys', 'TCS', 'TCS', 'Infosys', 'Oracle', 'Oracle', 'TCS', 'Infosys', 'M
         indtree', 'Mindtree']
         ['Data Analyst', 'Java Developer', 'Data Scientist', 'Data Analyst', 'Java De
         veloper', 'Data Scientist', 'Tester', 'Tester', 'Database Admin', 'Database A
         dmin']
         ['10.2', '9.6', '12.60', '10.2', '9.6', '12.60', '6.50', '6.51', '8.30', '8.3
         1']
In [14]:
         studentdata=[]
         studentdata.append(RollNo)
         studentdata.append(Name)
         studentdata.append(Gender)
         studentdata.append(DOB)
         studentdata.append(Maths)
         studentdata.append(Physics)
         studentdata.append(Chemistry)
         studentdata.append(Total)
         studentdata.append(Percentage)
         studentdata.append(Company)
         studentdata.append(JobRole)
         studentdata.append(Package)
```

In [15]: studentdata

```
Out[15]: [['1', '2', '3', '4', '5', '6', '7', '8', '9', '10'],
             ['John',
               'Mayur',
               'Mangesh',
               'Jessica',
               'Jennifer',
               'Ramesh',
               'Suresh',
               'Ganesh',
               'Komal',
               'Mayuri'],
             ['Male',
               'Male',
               'Male',
               'Female',
               'Female',
               'Male',
               'Male',
               'Male',
               'Female',
               'Female'],
             ['05-04-1988',
               '04-05-1987',
              '25-05-1989',
               '12-08-1990',
               '02-09-1989',
               '03-09-1989',
               '04-09-1990',
               '05-10-1989',
               '06-09-1989',
               '07-02-1988'],
             ['55', '75', '25', '78', '58', '88', '56', '54', '46', '89'], ['45', '55', '54', '55', '96', '78', '89', '55', '66', '87'], ['56', '55', '89', '86', '78', '58', '69', '88', '65', '54'],
             ['156', '185', '168', '219', '232', '224', '214', '197', '177', '230'],
             ['52.00',
               '61.67'
               '56.00',
              '73.00',
               '77.33',
              '74.67',
               '71.33',
               '65.67',
               '59.00',
              '76.67'],
             ['Infosys',
               'TCS',
              'TCS',
               'Infosys',
               'Oracle',
               'Oracle',
               'TCS',
               'Infosys',
               'Mindtree',
               'Mindtree'],
             ['Data Analyst',
               'Java Developer',
```

```
'Data Scientist',
 'Data Analyst',
 'Java Developer',
 'Data Scientist',
 'Tester',
 'Tester',
 'Database Admin',
 'Database Admin'],
['10.2',
 '9.6',
 '12.60',
 '10.2',
 '9.6',
 '12.60',
 '6.50',
 '6.51',
 '8.30',
 '8.31']]
```

## **Writing Data to New File**

```
In [16]:
          fw=open("StudentDetails.csv","w")
In [17]:
          data to write=[]
          for i in range(len(studentdata[0])):# 10 rows
              row=list()
              for j in range(len(studentdata)):#12 col
                   data=studentdata[j][i]
                   row.append(data)
              row.append('\n')
              data to write.append(",".join(row))
In [18]: data to write
Out[18]: ['1,John,Male,05-04-1988,55,45,56,156,52.00,Infosys,Data Analyst,10.2,\n',
           '2,Mayur,Male,04-05-1987,75,55,55,185,61.67,TCS,Java Developer,9.6,\n',
           '3, Mangesh, Male, 25-05-1989, 25, 54, 89, 168, 56.00, TCS, Data Scientist, 12.60, \n',
           '4, Jessica, Female, 12-08-1990, 78, 55, 86, 219, 73.00, Infosys, Data Analyst, 10.
          2,\n',
           '5, Jennifer, Female, 02-09-1989, 58, 96, 78, 232, 77.33, Oracle, Java Developer, 9.
           '6, Ramesh, Male, 03-09-1989, 88, 78, 58, 224, 74.67, Oracle, Data Scientist, 12.6
          0,\n',
           '7,Suresh,Male,04-09-1990,56,89,69,214,71.33,TCS,Tester,6.50,\n',
           '8, Ganesh, Male, 05-10-1989, 54, 55, 88, 197, 65.67, Infosys, Tester, 6.51, \n',
           '9, Komal, Female, 06-09-1989, 46, 66, 65, 177, 59.00, Mindtree, Database Admin, 8.3
          0,\n',
           '10,Mayuri,Female,07-02-1988,89,87,54,230,76.67,Mindtree,Database Admin,8.3
          1,\n']
```

```
In [19]: fw.writelines(data_to_write)
In [20]: fw.close()
In []:
```