158=LOKESH SARODE

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[1]:
```
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-

```
RollNo=[]
Name=[]
Gender=[]
DOB=[]
```

```
for row in info_dataset[1:]:
    RollNo.append(row[0])
    Name.append(row[1])
    Gender.append(row[2])
    DOB.append(row[3])
```

[4]:
```
print(RollNo)
print(Name)
print(Gender)
print(DOB)
```

09-1989'], ['10', 'Mayuri', 'Female', '07-02-1988']] [2]:

[3]:

```
['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']
```

[5]:
```
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', '55',
 '45', '56', '156', '52.00'], ['2', '75', '55', '55', '185', '61.67'], ['3',
 '25', '54', '89', '168', '56.00'], ['4', '78', '55', '86', '219', '73.00'],
['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',
 '197', '65.67'], ['9', '46', '66', '65', '177', '59.00'], ['10', '89', '87',
'54', '230', '76.67']]
```

[6]:
```
Maths=[]
Physics=[]
Chemistry=[]
Total=[]
Percentage=[]
```

[7]:
```
for row in marks_dataset[1:]:
    Maths.append(row[1])
    Physics.append(row[2])
    Chemistry.append(row[3])
    Total.append(row[4])
    Percentage.append(row[5])
```

[8]:
```
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']

[9]:
```
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 Analyst', '10.2'], ['2', 'TCS', 'Java Developer', '9.6'], ['3', 'TCS', 'Data Scientist', '12.60'], ['4', 'Infosys', 'Data Analyst', '10.2'], ['5', 'Oracle', 'Java Developer', '9.6'], ['6', 'Oracle', 'Data Scientist', '12.60'], ['7', 'TCS', 'Tester', '6.50'], ['8', 'Infosys', 'Tester', '6.51'], ['9', 'Mindtree',

```
Company=[]
JobRole=[]
Package=[]
```

```
for row in placement_dataset[1:]:
    Company.append(row[1])
    JobRole.append(row[2])
    Package.append(row[3])
```

[12]:
```
print(Company)
print(JobRole)
print(Package)
```

'Database Admin', '8.30'], ['10', 'Mindtree', 'Database Admin', '8.31']] [10]:

[11]:

['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']

[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)
print(studentdata)
```

[['1', '2', '3', '4', '5', '6', '7', '8', '9', '10'], ['John', 'Mayur',
'Mangesh', 'Jessica', 'Jennifer', 'Ramesh', 'Suresh', 'Ganesh', 'Komal',

'Mayuri'],'Female', 'Female'], ['Male', 'Male', ['05-04 'Male',-1988', '04'Female',-05-
1987 'Female',', '25-05 'Male',-1989', '12'Male',-08-1990 'Male',',

'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']]

[15]:

```
fw=open("StudentDetails.csv","w")
```

[16]:

```
data_to_write=[] for i in
range(len(studentdata[0])):
row=list() for j in
range(len(studentdata)):
        data=studentdata[j][i] row.append(data)
    row.append('\n')
    data_to_write.append(",".join(row)) print(data_to_write)
```

```
['1,John,Male,05-04-1988,55,45,56,156,52.00,Infosys,Data     Analyst,10.2,\n']
['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']
['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']
['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']
['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,\n']

['2,Mayur,Male,04'1,John,Male,05--0405--1988,55,451987,75,55,56,156,52.00,Infosys,Data
Analyst,10.2,,55,185,61.67,TCS,Java Developer,9.6,\n',\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,\n',
'6,Ramesh,Male,03-09-1989,88,78,58,224,74.67,Oracle,Data Scientist,12.60,\n']
  ['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,\n',
  '6,Ramesh,Male,03-09-1989,88,78,58,224,74.67,Oracle,Data Scientist,12.60,\n',
  '7,Suresh,Male,04-09-1990,56,89,69,214,71.33,TCS,Tester,6.50,\n']
```

```
['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,\n',
 '6,Ramesh,Male,03-09-1989,88,78,58,224,74.67,Oracle,Data Scientist,12.60,\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']
['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,\n',
 '6,Ramesh,Male,03-09-1989,88,78,58,224,74.67,Oracle,Data Scientist,12.60,\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,8.30,\n']
['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,\n',
 '6,Ramesh,Male,03-09-1989,88,78,58,224,74.67,Oracle,Data Scientist,12.60,\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,8.30,\n',
 '10,Mayuri,Female,07-02-1988,89,87,54,230,76.67,Mindtree,Database
Admin,8.31,\n']
```

```
fw.writelines(data_to_write)
```

```
fw.close()
```

[17]:

[18]:
```
print("Math              Marks=",Maths)
```

[19]:
```
print("Phyics          Marks=",Physics)
print("Chemistry    Marks=",Chemistry)
math=[int(i)    for    i    in    Maths]
physics=[int(i)   for   i   in  Physics]
chemistry=[int(i)  for i  in Chemistry]
sum_of_marks=[]   avg=[]   for   i   in
range(len(math)):
    sum_of_marks.append(math[i]+physics[i]+chemistry[i])
    avg.append(round(sum_of_marks[i],2))
print("Sum  of  Marks=",sum_of_marks)  print("Average
Marks=",avg)
```

```
 Math Marks= ['55', '75', '25', '78', '58', '88', '56', '54', '46', '89']
 Physics Marks= ['45', '55', '54', '55', '96', '78', '89', '55', '66', '87']
Chemistry Marks= ['56', '55', '89', '86', '78', '58', '69', '88', '65', '54'] Sum of
Marks= [156, 185, 168, 219, 232, 224, 214, 197, 177, 230]
 Average Marks= [156, 185, 168, 219, 232, 224, 214, 197, 177, 230]
```

[20]:
```
print("Maximum Marks=",max(avg))
```

```
Maximum Marks= 232
```

[21]:
```
print("Minimum Marks=",min(avg))
```

```
Minimum Marks= 156
```

[22]:
```
print("Total No of Student=",len(studentdata[0]))
```

```
Total No of Student= 10
```

[23]:
```
per=[]
for i in range(len(sum_of_marks)):
    per.append(round((100*sum_of_marks[i]/270),2))
print("Percentage=",per)
```

```
Percentage= [57.78, 68.52, 62.22, 81.11, 85.93, 82.96, 79.26, 72.96, 65.56,
85.19]
```