

161 – Shubham kumar

May 11, 2023

```
[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',

```

```

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)

```

```

'03-09-1989', '04-09-1990', '05-10-1989', '06-09-1989', '07-02-1988']

```

[5]:

```

[['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',
```

```
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)
```

```
'76.67'] [9]:
```

```

[['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']

```

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['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',

```

```

'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) print("Phyics
[19]: 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']
Phyics 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]