

Assignment No.1

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Batch:- H1 819

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Q. Take/Prepare any text files for any real-life application. For Ex. “Stud.txt”, “Placement.csv” and “Result. csv” files for result Analysis. Combine into “StudentDetails.csv”. Perform all statistical analysis (Average, Max, Min, Count, Sum, Percentage) on it

```
import csv
f1=open("C:\\Users\\Desktop\\811eds\\stud_info.csv","r")

info_dataset=[]
while True:
    data=f1.readline()
    if data:
        info_dataset.append(data.replace("\n","").split(","))
    else:
        break;

print(info_dataset)
f2=open("C:\\Users\\Desktop\\835eds\\stud_placement.csv","r")
f3=open("C:\\Users\\Desktop\\811eds\\student_marks.csv","r")
```

output

```
[['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', '']]
```

```
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])
```

```
print(RollNo)
```

```
print(name)
```

```
print(Gender)
```

```
print(DOB)
```

OUTPUT

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

```
RollNo=[]
```

```
Company=[]
```

```
JobRole=[]
```

```
Package=[]
```

```
for row in placement_dataset[1:]:
```

```
RollNo.append(row[0])
```

```
Company.append(row[1])
```

```
JobRole.append(row[2])
```

```
Package.append(row[3])
```

```
print(RollNo)
```

```
print(Company)
```

```
print(JobRole)
```

```
print(Package)
```

OUTPUT

```
['1', '2', '3', '4', '5', '6', '7', '8', '9', '10']
```

```
['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']
```

```
f3=open("C:\\Users\\Desktop\\835eds\\student_marks.csv","r")  
marks_dataset=[] while True: data=f3.readline() if data:  
marks_dataset.append(data.replace("\n","").split(","))  
  
else: break;  
  
print(marks_dataset)
```

OUTPUT

```
[['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', '']]
```

```
Roll=[]
```

```
Maths=[]
```

```
Physics=[]
```

```
Chemistry=[]
```

```
Total=[]
```

```
Percentage=[]
```

```
for row in marks_dataset[1:]: Roll.append(row[0])
```

```
Maths.append(row[1])
```

```
Physics.append(row[2])
```

```
Chemistry.append(row[3])
```

```
Total.append(row[4])

Percentage.append(row[5])

print(Roll)

print(Maths)

print(Physics)

print(Chemistry)

print(Total)

print(Percentage)
```

OUTPUT

```
['1', '2', '3', '4', '5', '6', '7', '8', '9', '10']

['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']
```

```
student_data=[] for i in range(len(marks_dataset)):
student_data.append(info_dataset[i]+placement_dataset[i] +marks_dataset[i]) print(student_data)
```

OUTPUT

```
[['Roll No', 'name', 'Gender', 'DOB', '', 'Roll No', 'Company', 'JobRole', 'Package', '', 'Roll', 'Maths',
'Physics', 'Chemistry', 'Total', 'Percentage', ''],

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

['2', 'Mayur', 'Male', '04-05-1987', '', '2', 'TCS', 'Java Developer', '9.6', '', '2', '75', '55', '55', '185',
'61.67', ''],

['3', 'Mangesh', 'Male', '25-05-1989', '', '3', 'TCS', 'Data Scientist', '12.60', '', '3', '25', '54', '89', '168',
'56.00', ''],

['4', 'Jessica', 'Female', '12-08-1990', '', '4', 'Infosys', 'Data Analyst', '10.2', '', '4', '78', '55', '86', '219',
'73.00', ''],
```

```
[ '5', 'Jennifer', 'Female', '02-09-1989', "", '5', 'Oracle', 'Java Developer', '9.6', "", '5', '58', '96', '78', '232', '77.33', ""],
[ '6', 'Ramesh', 'Male', '03-09-1989', "", '6', 'Oracle', 'Data Scientist', '12.60', "", '6', '88', '78', '58', '224', '74.67', ""],
[ '7', 'Suresh', 'Male', '04-09-1990', "", '7', 'TCS', 'Tester', '6.50', "", '7', '56', '89', '69', '214', '71.33', ""],
[ '8', 'Ganesh', 'Male', '05-10-1989', "", '8', 'Infosys', 'Tester', '6.51', "", '8', '54', '55', '88', '197', '65.67', ""],
[ '9', 'Komal', 'Female', '06-09-1989', "", '9', 'Mindtree', 'Database Admin', '8.30', "", '9', '46', '66', '65', '177', '59.00', ""],
[ '10', 'Mayuri', 'Female', '07-02-1988', "", '10', 'Mindtree', 'Database Admin', '8.31', "", '10', '89', '87', '54', '230', '76.67', ""]]
```

```
studentdata=[] studentdata.append(RollNo)
studentdata.append(name)
studentdata.append(Gender)
studentdata.append(DOB)
studentdata.append(RollNo)
studentdata.append(Company)
studentdata.append(JobRole)
studentdata.append(Package)
studentdata.append(Roll)
studentdata.append(Maths)
studentdata.append(Physics)
studentdata.append(Chemistry)
studentdata.append(Total)
studentdata.append(Percentage)
print(studentdata)
```

OUTPUT

```
[[ '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'],
```

```
['1', '2', '3', '4', '5', '6', '7', '8', '9', '10'],
```

```
['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'],
```

```
['1', '2', '3', '4', '5', '6', '7', '8', '9', '10'],
```

```
['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']]
```

```
# fw=open("C:\\Users\\Desktop\\835eds\\ All_stud_details.csv","w") # stastical Operations
print("Math Marks=",Maths)
```

```
print("Physics 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=[]
```

```
average=[] for i in range(len(Math)):
```

```
sum_of_marks.append(Math[i]+Physics[i]+Chemistry[i]) average.append(round(sum_of_marks[i],2))
```

```
print("Sum of marks=",sum_of_marks)
```

```
print("Average of marks=",average)
```

OUTPUT

```
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 of marks= [156, 185, 168, 219, 232, 224, 214, 197, 177, 230]
#max marks print("maximum marks=",max(sum_of_marks))
print("minimum marks=",min(sum_of_marks))
print("total no of students=",len(studentdata[0]))
print("total no company=",len(studentdata[5]))
print("jobrole=",len(studentdata[6]))
per=[] for i in range(len(sum_of_marks)):
    per.append(round((100*sum_of_marks[i]/270),2))
print("Percentage=",per)
```

OUTPUT

maximum marks= 232

minimum marks= 156

total no of students= 10

total no company= 10

jobrole= 10

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