Practicle No.1

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Batch:- H1

Roll No.:-811

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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]