```
from google.colab import drive
drive.mount('/content/drive')
import pandas as pd

df1=pd.read_csv("drive/My Drive/srustiii/employeee csv.csv")
```

	EMPID	Gender	JobRole	MaritalStatus	DOB
0	E00001	Female	Sales Executive	Single	12-02-1987
1	E00002	Male	Research Scientist	Married	15-11-1982
2	E00003	Male	Laboratory Technician	Single	22-02-1986
3	E00004	Female	Research Scientist	Married	25-05-1977
4	E00005	Male	Laboratory Technician	Married	04-04-1995
1053	E01054	Male	Research Scientist	Married	02-03-1993
1054	E01055	Male	Healthcare Representative	Divorced	19-12-1982
1055	E01056	Male	Research Director	Divorced	08-04-1969
1056	E01057	Male	Sales Representative	Married	30-04-1972
1057	E01058	Female	Sales Executive	Single	11-09-1978

New Section

1058 rows × 5 columns

df2=pd.read_csv("drive/My Drive/srustiii/EmpSalDetails.csv")
df2

	EMPID	EducationField	Salary (\$)	YearsAtCompany				
0	E00001	Life Sciences	19479	6				
1	E00002	Life Sciences	24907	10				
2	E00003	Other	2396	0				
3	E00004	Life Sciences	23159	8				
4	E00005	Medical	16632	2				
1053	E01054	Life Sciences	2721	12				
1054	E01055	Life Sciences	20948	8				
1055	E01056	Medical	11929	14				
1056	E01057	Technical Degree	15747	3				
1057	E01058	Technical Degree	17485	5				
1058 rows × 4 columns								

```
import pandas as pd

df2=pd.read_csv("drive/My Drive/srustiii/
df2
```

	EMPID	Gender	JobRole	MaritalStatus	DOB
0	E00001	Female	Sales Executive	Single	12-02-1987
1	E00002	Male	Research Scientist	Married	15-11-1982
2	E00003	Male	Laboratory Technician	Single	22-02-1986
3	E00004	Female	Research Scientist	Married	25-05-1977
4	E00005	Male	Laboratory Technician	Married	04-04-1995
1053	E01054	Male	Research Scientist	Married	02-03-1993
1054	E01055	Male	Healthcare Representative	Divorced	19-12-1982
1055	E01056	Male	Research Director	Divorced	08-04-1969
1056	E01057	Male	Sales Representative	Married	30-04-1972

finaldf=pd.merge(df1,df2,on='EMPID')
finaldf

		EMPID	Gender	JobRole	MaritalStatus	DOB	EducationField	Salary (\$)	γ
	0	E00001	Female	Sales Executive	Single	12- 02- 1987	Life Sciences	19479	
	1	E00002	Male	Research Scientist	Married	15- 11- 1982	Life Sciences	24907	
	2	E00003	Male	Laboratory Technician	Single	22- 02- 1986	Other	2396	
	3	E00004	Female	Research Scientist	Married	25- 05- 1977	Life Sciences	23159	
	4	E00005	Male	Laboratory Technician	Married	04- 04- 1995	Medical	16632	
4									>

Double-click (or enter) to edit

finaldf.sort_values('Salary (\$)',ascending=False)

	EMPID	Gender	JobRole	MaritalStatus	DOB	EducationField	Salary (\$)	Υє
513	E00514	Male	Research Scientist	Single	03- 01- 1994	Medical	26999	
808	E00809	Female	Research Scientist	Divorced	28- 12- 1966	Life Sciences	26968	
107	E00108	Male	Sales Executive	Single	24- 05- 1968	Marketing	26959	
859	E00860	Female	Research Scientist	Married	19- 05- 1985	Life Sciences	26933	
386	E00387	Female	Laboratory Technician	Divorced	01- 02- 1992	Life Sciences	26914	
4								•

```
from google.colab import drive
drive.mount('/content/drive')
       Mounted at /content/drive
Double-click (or enter) to edit
file=open('/content/stud_info.csv','r')
info_dataset=[]
while True:
     data=file.readline()
     if data:
           info_dataset.append(data.replace("\n", "").split(','))
           break
print(info_dataset)
       [['Roll No', 'name', 'Gender', 'DOB'], ['1', 'John', 'Male', '05-04-1988'], ['2', 'Mayur', 'Male', '04-05-1987'], ['3', 'Mangesh', 'Male', '05-04-1988']
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)
       ['1']
       ['1', '2']
['1', '2',
                      '3']
       ['1', '2', '3', '4']
['1', '2', '3', '4', '5']
      ['1', '2', '3', '4', '5']
['1', '2', '3', '4', '5', '6']
['1', '2', '3', '4', '5', '6', '7']
['1', '2', '3', '4', '5', '6', '7', '8']
['1', '2', '3', '4', '5', '6', '7', '8', '9']
['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', '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', '07-02-19
      4
file=open('/content/student_marks (1).csv','r')
marks_dataset=[]
while True:
     data=file.readline()
           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', '185']
Physics=Maths=[]
Chemistry=[]
Total=[]
Percentage=[]
from google.colab import drive
drive.mount('/content/drive')
```

```
Mounted at /content/drive
import pandas as pd
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])
import pandas as pd
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])
       print(Maths)
       print(Physics)
       print(Chemistry)
       print(Total)
       print(Percentage)
           ['55', '45', '75', '55', '25', '54', '78', '55', '58', '96', '88', '78', '56', '89', '54', '55', '46', '66', '89', '87', '55', '45', '75
           ['55', '45', '75', '55', '25', '54', '78', '55', '58', '96', '88', '78', '56', '89', '54', '55', '46', '66', '89', '87', '55', '45', '75 ['56', '55', '89', '86', '78', '58', '69', '88', '65', '54', '56', '55', '89', '86', '78', '58', '69', '88', '65', '54'] ['156', '185', '168', '219', '232', '224', '214', '197', '177', '230', '156', '185', '168', '219', '232', '224', '214', '197', '177', '28', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '185', '18
          4
# Read Student Marks
file=open('/content/stud_placement.csv','r')
placement_dataset=[]
while True:
        data=file.readline()
                  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', '1
Company=[]
JobRole=[]
Package=[]
for row in placement dataset[1:]:
         Company.append(row[1])
         JobRole.append(row[2])
         Package.append(row[3])
print(Company)
print(JobRole)
print(Package)
           ['Infosys', 'TCS', 'TCS', 'Infosys', 'Oracle', 'Oracle', 'TCS', 'Infosys', 'Mindtree', 'Mindtree']
['Data Analyst', 'Java Developer', 'Data Scientist', 'Data Analyst', 'Java Developer', 'Data Scientist', 'Tester', 'Database #
['10.2', '9.6', '12.6', '10.2', '9.6', '12.6', '6.5', '6.51', '8.31']
          4
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)
studentdata
     [['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',
        '45',
       '75',
'55',
       '25',
       '54',
       '78',
       '55',
       '58',
       '96',
       '88',
        '78',
       '56',
       '89',
       '54',
       '55',
       '46',
       '66',
       '89',
       '87',
       '55',
       '45',
       '75',
       '55',
       '25',
       '54',
       '78',
fw=open("/content/EmpSalDetails.csv","w")
data_to_write=[]
for i in range(len(studentdata[0])):# 10 rows
    for j in range(len(studentdata)):#12 col
        data=studentdata[j][i]
        row.append(data)
    row.append('\n')
```

```
data_to_write.append(",".join(row))
data_to_write
         ['1,John,Male,05-04-1988,55,55,56,156,52.00,Infosys,Data Analyst,10.2,\n',
            2, Mayur, Male, 04-05-1987, 45, 45, 55, 185, 61.67, TCS, Java Developer, 9.6, \n',
           '3, Mangesh, Male, 25-05-1989, 75, 75, 89, 168, 56.00, TCS, Data Scientist, 12.6, \n'
           '4,Jessica,Female,12-08-1990,55,55,86,219,73.00,Infosys,Data Analyst,10.2,\n'
           '5, Jennifer, Female, 02-09-1989, 25, 25, 78, 232, 77.33, Oracle, Java Developer, 9.6, \n',
            '6,Ramesh,Male,03-09-1989,54,54,58,224,74.67,Oracle,Data Scientist,12.6,\n',
           '7,Suresh,Male,04-09-1990,78,78,69,214,71.33,TCS,Tester,6.5,\n',
           '8, Ganesh, Male, 05-10-1989, 55, 55, 88, 197, 65.67, Infosys, Tester, 6.51, \n'
            '9,Komal,Female,06-09-1989,58,58,65,177,59.00,Mindtree,Database Admin,8.3,\n',
           '10, Mayuri, Female, 07-02-1988, 96, 96, 54, 230, 76.67, Mindtree, Database Admin, 8.31, \n']
fw.writelines(data to write)
fw.close()
#1. Average package
package=studentdata[11:][0]
total_student=len(studentdata[11:][0])
# Converting String value to float
Num_package=[float(i) for i in package]
print('Average Package= ',sum(Num_package)/total_student)
        Average Package= 9.442
# 2.Min Package
print('Minimum Package= ',min(Num_package))
         Minimum Package= 6.5
# 3.Max Package
print('Minimum Package= ',max(Num_package))
         Minimum Package= 12.6
# 4.Sum
print("Math Marks=",studentdata[4])
print("Physics Marks=",studentdata[5])
print("Chemistry Marks=",studentdata[6])
# Converting String value to int
Math_Marks=[int(i) for i in studentdata[4]]
Physics_Marks=[int(i) for i in studentdata[5]]
Chemistry_Marks=[int(i) for i in studentdata[6]]
#Total marks=
Totalmarks=[]
for i in range(len(studentdata[6])):
      Totalmarks.append(Math_Marks[i]+Physics_Marks[i]+Chemistry_Marks[i])
print("Total Marks=",Totalmarks)
         Math Marks= ['55', '45', '75', '55', '25', '54', '78', '55', '58', '96', '88', '78', '56', '89', '54', '55', '46', '66', '89', '87', '55
        Physics Marks= ['55', '45', '75', '55', '25', '54', '78', '55', '58', '96', '88', '78', '56', '89', '54', '55', '46', '66', '89', '87', Chemistry Marks= ['56', '55', '89', '86', '78', '58', '69', '88', '65', '54', '56', '55', '89', '86', '78', '68', '68', '65', '54', '56', '55', '89', '88', '68', '78', '68', '78', '68', '78', '68', '78', '68', '78', '68', '78', '68', '78', '68', '78', '68', '78', '68', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '78', '7
        Total Marks= [166, 145, 239, 196, 128, 166, 225, 198, 181, 246, 232, 211, 201, 264, 186, 168, 161, 220, 243, 228]
        4
# 5. Percentage
percentage=[round(marks/3,2) for marks in Totalmarks]
print("Percentage=",percentage)
         Percentage= [55.33, 48.33, 79.67, 65.33, 42.67, 55.33, 75.0, 66.0, 60.33, 82.0, 77.33, 70.33, 67.0, 88.0, 62.0, 56.0, 53.67, 73.33, 81.0
        4
print("No of Student=",len(studentdata[0]))
print("No of Attribute=",len(studentdata))
```

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