EDS ASSIGNMENT NO:1

Name:Paresh Bhamare

Roll NO:104

DIV:A

```
# read file
f1=open('/content/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)
print(info_dataset[1])


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)


f2=open('/content/stud_placement.csv','r')
placement_dataset=[]
while True:
  data=f2.readline()
  if data:
    placement_dataset.append(data.replace("\n","").split(','))
  else:
     break
print(placement_dataset)


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)
```

```
f3=open('/content/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)

Math=[]
Physics=[]
Chemistry=[]
Total=[]
Percentage=[]

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

print(Math)
print(Physics)
print(Chemistry)
print(Total)
```

```
print(Percentage)


studentdata=[]
studentdata.append(RollNo)
studentdata.append(Name)
studentdata.append(Gender)
studentdata.append(DOB)
studentdata.append(Math)
studentdata.append(Physics)
studentdata.append(Chemistry)
studentdata.append(Total)
studentdata.append(Percentage)
studentdata.append(Company)
studentdata.append(JobRole)
studentdata.append(Package)
print(studentdata)


fw=open('StudentDetails.csv','w')


data_to_write=[]
for i in range(len(studentdata[0])):# 10 rows
   row=list()
   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


fw.writelines(data_to_write)


fw.close()


# 1.Sum of Marks
# 2.Average Marks
print("Math marks=",Math)
print("Physics Marks=",Physics)
print("Chemistry Marks=",Chemistry)
Math=[int(i) for i in Math]
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)


# 3. Max Marks
print("Maximum Marks",max(avg))


# 4. Min marks
# Max Marks
print("Maximum Marks=",min(avg))
```

```
# 5. Count total no of student

print("Total No of student=",len(studentdata[0]))



# 6. Percentage

# Assume math marks=90, physics=90, chem=90

per=[]

for i in range(len(sum_of_marks)):

   per.append(round((100*sum_of_marks[i]/270),2))

print("percentage=",per)
```

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']]

['1', 'John', 'Male', '05-04-1988']

['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']

[['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']]

['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']

[['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']]

['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']

[['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', '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']]

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]

Maximum Marks 232

Maximum Marks= 156

Total No of student= 10

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

```
f1=open("emp1.csv",'r')

f2=open("sal.csv",'r')
```

```
f3=open("emp_sal.csv",'w')


contents1=f1.read()
contents2=f2.read()

nm=[]
sal=[]

lines1=contents1.split("\n")
lines2=contents2.split("\n")

for l1 in lines1:
    words1=l1.split(",")

    for l2 in lines2:
        words2=l2.split(",")
        if(words1[0]==words2[0]):
          l1=l1+","+words2[1]+","+words2[2]+"\n"
          f3.write(l1)


          nm.append(words1[1])
          sal.append(int(words2[2]))
          print(l1)


          f1.close()
          f2.close()
          f3.close()

          print(nm)
          print(sal)
```

Output:

1,Sanvi,Manager,100000,Manager,100000

2,Mrunmayee,Sr. Manager,95000,Sr. Manager,150000

3,Jayesh,Manager,80000,Manager,90500

4,Gouri,Sr. Manager,95000,Sr. Manager,100500

5,Mahesh,Supervisor,500000,Supervisor,85000

['Sanvi', 'Mrunmayee', 'Jayesh', 'Gouri', 'Mahesh']

[100000, 150000, 90500, 100500, 85000]

```
f = open("emp.csv","r")

contents = f.read()

lines = contents.split("\n")

eid = []; nm = []; desgn = []; sal = [];

for l in lines:
    words = l.split(",")
    print(words)
    eid.append(int(words[0]))
    nm.append(words[1])
    desgn.append(words[2])
    sal.append(int(words[3]))

print("Employee IDs:",eid)
print("Employee Names:",nm)
print("Employee DEsignations:",desgn)
print("Employee Salary:",sal)

print("Max Salary:",max(sal))
print("Min Salary:",min(sal))
print("Avg Salary:",sum(sal)/len(sal))
```

Output:

['1', 'Sanvi', 'Manager', '100000']

['2', 'Mrunmayee', 'Sr. Manager', '95000']

['3', 'Jayesh', 'Manager', '80000']

['4', 'Gouri', 'Sr. Manager', '95000']

['5', 'Mahesh', 'Supervisor', '500000']

Employee IDs: [1, 2, 3, 4, 5]

Employee Names: ['Sanvi', 'Mrunmayee', 'Jayesh', 'Gouri', 'Mahesh']

Employee DEsignations: ['Manager', 'Sr. Manager', 'Manager', 'Sr. Manager', 'Supervisor']

Employee Salary: [100000, 95000, 80000, 95000, 500000]

Max Salary: 500000

Min Salary: 80000

Avg Salary: 174000.0

```
f = open("student.csv","r")

contents = f.read()

lines = contents.split("\n")

sid = []; nm = []; branch = []; mar = [];

for l in lines:
    words = l.split(",")
    print(words)
    sid.append(int(words[0]))
    nm.append(words[1])
    branch.append(words[2])
    mar.append(float(words[3]))

print("Student IDs:",sid)
print("Student Names:",nm)
print("Student Branch:",branch)
print("Syudent sgpa:",mar)

print("Max marks:",max(mar))
print("Min marks:",min(mar))
print("Avg marks:",sum(mar)/len(mar))
```

Output:

['1', 'Sankalp', 'Mechanical', '7.6']

['2', 'Tejas', 'Computer', '8.4']

['3', 'Anand', 'Civil', '7.2']

['4', 'Ganesh', 'Computer', '7.3']

['5', 'Ishika', 'Computer', '7.7']

Student IDs: [1, 2, 3, 4, 5]

Student Names: ['Sankalp', 'Tejas', 'Anand', 'Ganesh', 'Ishika']

Student Branch: ['Mechanical', 'Computer', 'Civil', 'Computer', 'Computer']

Syudent sgpa: [7.6, 8.4, 7.2, 7.3, 7.7]

Max marks: 8.4

Min marks: 7.2

Avg marks: 7.640000000000001

```
import csv
def top_5_emp(d3):
    d3.sort(key = lambda x: int(x[4]),reverse=True)
    print("Sorted Data:",d3)

    print("\n\nTop1 Employee",d3[0][1])
    print("Top2 Employee",d3[1][1])
    print("Top1 Employee",d3[2][1])
    print("Top2 Employee",d3[3][1])
    print("Top2 Employee",d3[4][1])

f1 = open("emp1.csv","r")
f2 = open("sal1.csv","r")
f3 = open("emp_sal.csv","w")

d1=list(csv.reader(f1,delimiter=','))
d2=list(csv.reader(f2,delimiter=','))

print("\n\nFile1 Contents:",d1)
print("\n\nFile2 Contents:",d2)
d3 = []
for i in range(len(d1)):
    d3.append(d1[i] + d2[i])

print(d3)
cw = csv.writer(f3)
cw.writerows(d3)

top_5_emp(d3)


f1.close()
f2.close()
f3.close()
```

Ouput:

File1 Contents: [['1', 'Sanvi', 'Pune'], ['2', 'Mrunmayee', 'Pune'], ['3', 'Jayesh', 'Nashik'], ['4', 'Gouri', 'Nashik'], ['5', 'Mahesh', 'Pune']]

File2 Contents: [['Manager', '100000'], ['Sr. Manager', '150000'], ['Manager', '90500'], ['Sr. Manager', '100500'], ['Supervisor', '85000']]

[['1', 'Sanvi', 'Pune', 'Manager', '100000'], ['2', 'Mrunmayee', 'Pune', 'Sr. Manager', '150000'], ['3', 'Jayesh', 'Nashik', 'Manager', '90500'], ['4', 'Gouri', 'Nashik', 'Sr. Manager', '100500'], ['5', 'Mahesh', 'Pune', 'Supervisor', '85000']]

Sorted Data: [['2', 'Mrunmayee', 'Pune', 'Sr. Manager', '150000'], ['4', 'Gouri', 'Nashik', 'Sr. Manager', '100500'], ['1', 'Sanvi', 'Pune', 'Manager', '100000'], ['3', 'Jayesh', 'Nashik', 'Manager', '90500'], ['5', 'Mahesh', 'Pune', 'Supervisor', '85000']]

Top1 Employee Mrunmayee

Top2 Employee Gouri

Top1 Employee Sanvi

Top2 Employee Jayesh

Top2 Employee Mahesh

```
import csv
def top_5_emp(d3):
    d3.sort(key = lambda x: float(x[4]),reverse=True)
    print("Sorted Data:",d3)

    print("\n\nTop1 Student",d3[0][1])
    print("Top2 Student",d3[1][1])
    print("Top1 Student",d3[2][1])
    print("Top2 Student",d3[3][1])
    print("Top2 Student",d3[4][1])

f1 = open("std1.csv","r")
f2 = open("std2.csv","r")
f3 = open("std3.csv","w")

d1=list(csv.reader(f1,delimiter=','))
d2=list(csv.reader(f2,delimiter=','))

print("\n\nFile1 Contents:",d1)
print("\n\nFile2 Contents:",d2)
d3 = []

for i in range(len(d1)):
    d3.append(d1[i] + d2[i])

print(d3)
cw = csv.writer(f3)
cw.writerows(d3)

top_5_emp(d3)


f1.close()
f2.close()
f3.close()
```

Output:

File1 Contents: [['1', 'Sankalp', 'Kholapur'], ['2', 'Tejas', 'Satara'], ['3', 'Anand', 'washim'], ['4', 'Ganesh', 'Chandrapue'], ['5', 'Ishika', 'Nagpur']]

File2 Contents: [['Mechanical', '7.6'], ['Computer', '8.4'], ['Civil', '7.2'], ['Computer', '7.3'], ['Computer', '7.7']]

[['1', 'Sankalp', 'Kholapur', 'Mechanical', '7.6'], ['2', 'Tejas', 'Satara', 'Computer', '8.4'], ['3', 'Anand', 'washim', 'Civil', '7.2'], ['4', 'Ganesh', 'Chandrapue', 'Computer', '7.3'], ['5', 'Ishika', 'Nagpur', 'Computer', '7.7']]

Sorted Data: [['2', 'Tejas', 'Satara', 'Computer', '8.4'], ['5', 'Ishika', 'Nagpur', 'Computer', '7.7'], ['1', 'Sankalp', 'Kholapur', 'Mechanical', '7.6'], ['4', 'Ganesh', 'Chandrapue', 'Computer', '7.3'], ['3', 'Anand', 'washim', 'Civil', '7.2']]

Top1 Student Tejas

Top2 Student Ishika

Top1 Student Sankalp

Top2 Student Ganesh

Top2 Student Anand

```
rupees=float(input("Please enter rupees:"))
dollars=rupees/82
print(dollars)
```

Input:Please enter rupees:800

Output:9.75609756097561