

# ASSIGNMENT 1

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# readfile
f1=open('/content/stud_info_2(1).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/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/result.csv','r')
marks_dataset=[]
while True:
    data=f3.readline()
    if data:
        marks_dataset.append(data.replace("\n","").split(','))
    else:
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        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()

# a.Sum of Marks
# b.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]

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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)

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

# d.Min marks
# e.Max Marks
print("Maximum Marks=",min(avg))

# f.Count total no of student
print("Total No of student=",len(studentdata[0]))

# g.Percentage
# h.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)

```

1	palak	female	02-04-2002
2	aditya	male	05-07-2002
3	siddhant	male	07-08-2003
4	rakshita	female	08-04-2003
5	atharv	male	03-04-2002

1	amazon	female	02-04-2002
2	cisco	male	05-07-2002
3	microsoft	female	07-08-2003
4	flipkart	male	08-04-2003
5	facebook	male	03-04-2002

Roll	Maths	Physics	Chemistry	Total	Percentage
1	78	90	84	156	90
2	90	57	59	198	61.89
3	45	89	56	178	75.89
4	80	85	83	259	67
5	89	68	70	214	77.33
6	98	75	58	231	70.56
7	57	96	69	231	84.65
8	44	98	66	173	69.56
9	56	38	34	159	59.45
10	78	62	90	197	86.34

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[['1', 'palak', 'female', '02-04-2002'], [2, 'aditya', 'male', '05-07-2002'], [3, 'sidhant', 'male', '07-08-2003'], [4, 'rakshita', 'female', '08-04-2003'], [5, 'atharv', 'male', '05-07-2002']]
[['2', 'aditya', 'male', '05-07-2002']]
[['2', '3', '4', '5']]
[['aditya', 'sidhant', 'rakshita', 'atharv']]
[['male', 'male', 'female', 'male']]
[['05-07-2002', '07-08-2003', '08-04-2003', '03-04-2002']]
[['1', 'amazon', 'female', '02-04-2002'], [2, 'cisco', 'male', '05-07-2002'], [3, 'microsoft', 'female', '07-08-2003'], [4, 'flipkart', 'male', '08-04-2003'], [5, 'facebook', 'male', '05-07-2002']]
[['2', '3', '4', '5']]
[['cisco', 'microsoft', 'flipkart', 'facebook']]
[['male', 'female', 'male', 'male']]
[['05-07-2002', '07-08-2003', '08-04-2003', '03-04-2002']]
[['Roll', 'Maths', 'Physics', 'Chemistry', 'Total', 'Percentage'], [1, '78', '90', '84', '156', '90'], [2, '90', '57', '59', '198', '61.89'], [3, '45', '89', '56', '178', '75.89'], [4, '78', '90', '45', '80', '89', '98', '57', '44', '56', '78'], [5, '90', '57', '89', '85', '68', '75', '96', '98', '38', '62'], [6, '84', '59', '56', '83', '70', '58', '69', '66', '34', '90'], [7, '156', '198', '178', '259', '214', '231', '231', '173', '159', '197'], [8, '90', '61.89', '75.89', '67', '77.33', '70.56', '84.65', '69.56', '59.45', '86.34']]
[['2', '3', '4', '5'], ['aditya', 'sidhant', 'rakshita', 'atharv'], ['male', 'male', 'female', 'male'], ['05-07-2002', '07-08-2003', '08-04-2003', '03-04-2002'], ['78', '90', '45', '89']]
Math marks= ['78', '90', '45', '80', '89', '98', '57', '44', '56', '78']
Physics Marks= ['90', '57', '89', '85', '68', '75', '96', '98', '38', '62']
Chemistry Marks= ['84', '59', '56', '83', '70', '58', '69', '66', '34', '90']
Sum of Marks= [252, 206, 190, 248, 227, 231, 222, 208, 128, 230]
Average Marks= [252, 206, 190, 248, 227, 231, 222, 208, 128, 230]
Maximum Marks 252
Maximum Marks= 128
Total No of student= 4
percentage= [93.33, 76.3, 70.37, 91.85, 84.07, 85.56, 82.22, 77.04, 47.41, 85.19]
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