EDS Assignment no.1

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ROLL NO : 524

BATCH : E2

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# 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=[]
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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
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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']]
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['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]
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