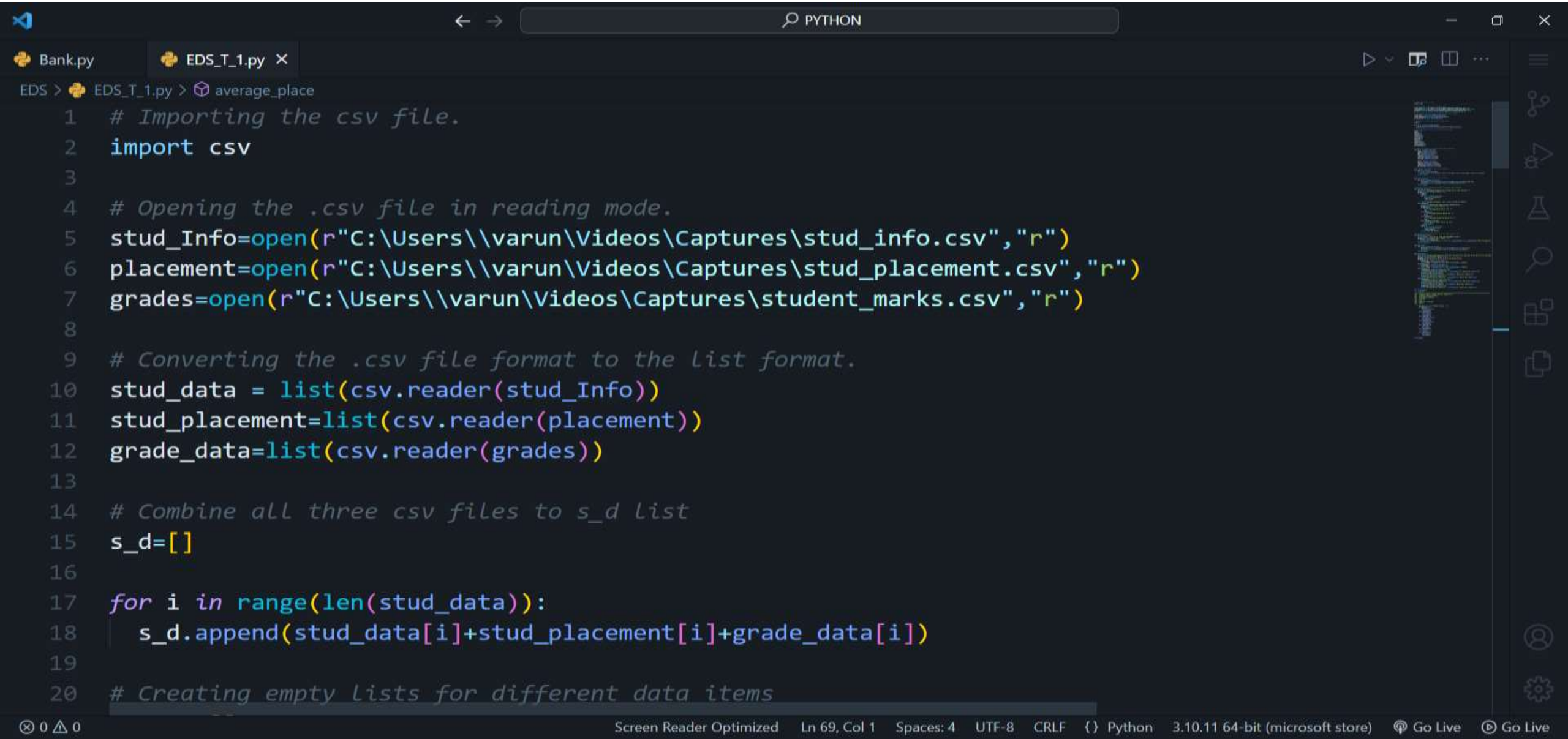
503_VRB_EDS_P1

Varun Ravi Balbudhe (E1) (503)

Essentials of Data Science

Practical No 1: (Graded Assignment)



```
19
20  # Creating empty lists for different data items
21  name = []
22  dob=[]
23  gender=[]
24  company=[]
25  job_role=[]
26  package=[]
27  maths=[]
28  physics=[]
29  chemistry=[]
30  total_marks=[]
31  percentage=[]
32
33  # Input the values in to the specified categories.
34  for i in range(1,len(s_d)):
35      name.append(s_d[i][1])
36      gender.append(s_d[i][2])
37      dob.append(s_d[i][3])
38      company.append(s_d[i][5])
```

```python
# Input the values in to the specified categories.
for i in range(1,len(s_d)):
    name.append(s_d[i][1])
    gender.append(s_d[i][2])
    dob.append(s_d[i][3])
    company.append(s_d[i][5])
    job_role.append(s_d[i][6])
    package.append(s_d[i][7])

    maths.append(s_d[i][9])
    physics.append(s_d[i][10])
    chemistry.append(s_d[i][11])
    percentage.append(s_d[i][13])

# Printing the students and marks together.
def subject_total():
    for i in range(len(s_d)):
        print("<",i,">",s_d[i][1],"\t\t",s_d[i][9],"\t\t",s_d[i][10],"\t\t",s_d[i][11])
    print("\n\n")
```

```
48  def subject_total():
49      for i in range(len(s_d)):
50          print("<",i,">",s_d[i][1],"\t\t",s_d[i][9],"\t\t",s_d[i][10],"\t\t",s_d[i][11])
51      print("\n\n")
52
53  # printing the percentage of the students.
54  def roll_total():
55      for i in range(1,len(s_d)):
56          percent=(((int(s_d[i][9])+int(s_d[i][10])+int(s_d[i][11]))*0.33))
57          print("<",i,">",s_d[i][1],"\t\t",round(percent,2),"%")
58      print("\n\n")
59
60  # Students above the 80 percentage scored by the students.
61  def average_place():
62      print("<1>.Average Placement\n<2>.Average Marks (per Subject) ")
63      move1=int(input("Enter Choice :"))
64      if move1==1:
65          _sum=0
66          for i in range(1,len(s_d)):
67              x=(float(s_d[i][7]))
```

```
66          for i in range(1,len(s_d)):
67              x=(float(s_d[i][7]))
68              _sum=_sum+x
69
70          print("Average Placement : Rs",round(_sum/10,2),"Lakhs")
71      elif move1==2:
72          print("<1>.Maths\n<2>.physics\n<3>.Chemistry\n")
73          move2=int(input("Enter Choice :"))
74          if move2==1:
75              print("Average Maths Marks Are :")
76              y=9
77          elif move2==2:
78              print("Average Physics Marks Are :")
79              y=10
80          elif move2==3:
81              print("Average Chemistry Marks Are :")
82              y=11
83          elif move2==str(move2):
84              print("Please Enter choice in int")
85              frontpage()
```

```
            print("Please Enter choice in int")
            frontpage()
        _sum1=0
        for i in range(1,len(s_d)):
            r=(float(s_d[i][y]))
            _sum1=_sum1+r
        print(_sum1/10,"Marks")

# find the company placements by both name and roll no :
def placement_roll():
    print("Enter (roll_no) to find the placement firm.")
    move1=int(input("Enter Roll Number :"))
    if move1>1 and move1<=10:
        print("<",s_d[move1][1],">","\t","{",s_d[move1][6],"}",s_d[move1][5],"With Package C
    print("\n\n\n")

def sum_sub():
    for i in range(1,len(s_d)):
        percent=(((int(s_d[i][9])+int(s_d[i][10])+int(s_d[i][11]))))
        print("<",i,">",s_d[i][1],"\t\t",round(percent,2),"Marks")
```

```
103         print("<",i,">",s_d[i][1],"\t\t",round(percent,2),"Marks")
104     print("\n\n")
105
106 def max_func():
107     print("<1>.Maximum Placement\n<2>.Minimum Placement\n<3>.Maximum Marks(M/P/C)\n<4>.Minim
108     move_4=int(input("Enter Choice :"))
109     if move_4==1:  # maximum placement
110         e=package_.index(max(package_))+1
111         print("Name :",name[e-1],"->","Rs",max(package_),"lakhs")
112     elif move_4==2: # minimum placement
113         e=package_.index(min(package_))+1
114         print("Name :",name[e-1],"->","Rs",min(package_),"lakhs")
115     elif move_4==3: # maximum marks per subject
116         r=chemistry.index(max(chemistry))+1
117         print("Maximum Marks <Chemistry> :",max(chemistry),"Marks By",name[r-1])
118         s=maths.index(max(maths))+1
119         print("Maximum Marks <Maths> :",max(maths),"Marks By",name[s-1])
120         t=physics.index(max(physics))+1
121         print("Maximum Marks <Physics> :",max(physics),"Marks By",name[t-1])
122     elif move_4==4: # minimum marks per subject
```

PYTHON

Bank.py | EDS_T_1.py

EDS > EDS_T_1.py > average_place

```python
        print("Maximum Marks <Maths> :",max(maths),"Marks By",name[s-1])
        t=physics.index(max(physics))+1
        print("Maximum Marks <Physics> :",max(physics),"Marks By",name[t-1])
    elif move_4==4: # minimum marks per subject
        r=chemistry.index(min(chemistry))+1
        print("Minimum Marks <Chemistry> :",min(chemistry),"Marks By",name[r-1])
        s=maths.index(min(maths))+1
        print("Minimum Marks <Maths> :",min(maths),"Marks By",name[s-1])
        t=physics.index(min(physics))+1
        print("Minimum Marks <Physics> :",min(physics),"Marks By",name[t-1])

def frontpage():
    print('''
<><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><>
<1> . Subject Marks [ Maths Physics Chemistry ].
<2> . Students Percentage(%).
<3> . Placement details.
<4> . Average.
<5> . Sum
<6> . Maximum / Minimum
<7> . Exit
```

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```
138  <5> . Sum
139  <6> . Maximum / Minimum
140  <7> . Exit
141  ''')
142      choice1=int(input("Enter Choice : "))
143      if choice1==1:
144          subject_total()
145          frontpage()
146      elif choice1==2:
147          roll_total()
148          frontpage()
149      elif choice1==3:
150          placement_roll()
151          frontpage()
152      elif choice1==4:
153          average_place()
154          frontpage()
155      elif choice1==5:
156          sum_sub()
157          frontpage()
```

```
147             roll_total()
148             frontpage()
149         elif choice1==3:
150             placement_roll()
151             frontpage()
152         elif choice1==4:
153             average_place()
154             frontpage()
155         elif choice1==5:
156             sum_sub()
157             frontpage()
158         elif choice1==7:
159             exit()
160         elif choice1==6:
161             max_func()
162             frontpage()
163
164 frontpage()
```

OUTPUT :

1.Subject Wise Marks for Every Student

```
PROBLEMS    OUTPUT    DEBUG CONSOLE    TERMINAL

Microsoft Windows [Version 10.0.22621.1635]
(c) Microsoft Corporation. All rights reserved.

C:\Users\varun\OneDrive\Desktop\VisERION PLAY\PYTHON>python -u "c:\Users\varun\OneDrive\Desktop\VisERION PLAY\PYTHON\EDS\EDS_T_1.py"

<><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><>
<1> . Subject Marks [ Maths Physics Chemistry ].
<2> . Students Percentage(%).
<3> . Placement details.
<4> . Average.
<5> . Sum
<6> . Maximum / Minimum
<7> . Exit

Enter Choice : 1
< 0 > name              Maths           Physics                 Chemistry
< 1 > John              55              45              56
< 2 > Mayur             75              55              55
< 3 > Mangesh           25              54              89
< 4 > Jessica           78              55              86
< 5 > Jennifer          58              96              78
< 6 > Ramesh            88              78              58
< 7 > Suresh            56              89              69
< 8 > Ganesh            54              55              88
< 9 > Komal             46              66              65
< 10 > Mayuri           89              87              54
```

2. Percentage(%)

```
Enter Choice : 2
< 1 > John              51.48 %
< 2 > Mayur             61.05 %
< 3 > Mangesh           55.44 %
< 4 > Jessica           72.27 %
< 5 > Jennifer          76.56 %
< 6 > Ramesh            73.92 %
< 7 > Suresh            70.62 %
< 8 > Ganesh            65.01 %
< 9 > Komal             58.41 %
< 10 > Mayuri           75.9 %
```

3.Placement Details For (Input)* Roll No

```
Enter Choice : 3
Enter (roll_no) to find the placement firm.
Enter Roll Number :7
< Suresh >        { Tester } TCS With Package Of 6.5 lakhs
```

4.Average
4.1Placement

```
Enter Choice : 4
<1>.Average Placement
<2>.Average Marks (per Subject)
Enter Choice :1
Average Placement : Rs 9.43 Lakhs
```

```
Enter Choice : 4
<1>.Average Placement
<2>.Average Marks (per Subject)
Enter Choice :2
<1>.Maths
<2>.physics
<3>.Chemistry

Enter Choice :
```

4.2Average Marks (Maths/Physics/Chemistry)

```
Enter Choice :1
Average Maths Marks Are :
62.4 Marks
```

```
Enter Choice :2
Average Physics Marks Are :
68.0 Marks
```

```
Enter Choice :3
Average Chemistry Marks Are :
69.8 Marks
```

5.Sum of All Subjects:

```
Enter Choice : 5
< 1 > John              156 Marks
< 2 > Mayur             185 Marks
< 3 > Mangesh           168 Marks
< 4 > Jessica           219 Marks
< 5 > Jennifer          232 Marks
< 6 > Ramesh            224 Marks
< 7 > Suresh            214 Marks
< 8 > Ganesh            197 Marks
< 9 > Komal             177 Marks
< 10 > Mayuri           230 Marks
```

6.Max/Mini

```
Enter Choice : 6
<1>.Maximum Placement
<2>.Minimum Placement
<3>.Maximum Marks(M/P/C)
<4>.Minimum Marks

Enter Choice :
```

6.1Maximum Placement:

```
Enter Choice :1
Name : Mangesh -> Rs 12.6 lakhs
```

6.2Minimum Placement:

```
Enter Choice :2
Name : Ganesh -> Rs 6.4 lakhs
```

6.3Maximum Marks Per Subject

```
Enter Choice :3
Maximum Marks <Chemistry> : 89 Marks By Mangesh
Maximum Marks <Maths> : 89 Marks By Mayuri
Maximum Marks <Physics> : 96 Marks By Jennifer
```

6.4Minimum Marks Per Subject

```
Enter Choice :4
Minimum Marks <Chemistry> : 54 Marks By Mayuri
Minimum Marks <Maths> : 25 Marks By Mangesh
Minimum Marks <Physics> : 45 Marks By John
```