Data and Visual Analitics

Lab Excersice 02a

NumPy

NumPy

Write a Python NumPy program that accepts student names and five marks (store in separate NumPy array). Calculate the total marks and percentage based on the input. Display student names and marks, total and average based on sample out below:

Sample Input : -

How many students? : 1

Enter names: Ragu ram

Enter Regression Analysis mark: 61

Enter Data and Visual Analytics mark: 67

Enter Practical Machine Learning mark: 65

Enter Natural Language Processing mark: 62

Enter Health Care Data analytics mark: 68

Sample Output : -

Names: Ragu ram

Regression Analysis mark: 61

Data and Visual Analytics mark: 67

Practical Machine Learning mark: 65

Natural Language Processing mark: 62

Health Care Data analytics mark: 68

Total: 323

Percentage: 64.6

Grade: Your Grade is B

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Sample Code

```
stuname = np.array([ ])
ra = np.array([ ])
dva = np.array([ ])
pml = np.array([ ])
npl = np.array([ ])
hcda = np.array([ ])

num = input("How many students?: ")

for i in num:
        name = input("input name of student "+ i)
        stuname[i].name
        mark = input("input mark of the student")
        ra[i]=mark
        •
        •
        •

for i in num:
        total=ra[i]+dva[i]+pml[i]+nlp[i]+hdca[i]
        percentage=(toal/500) * 100
        tot[i]=total
        per[i]=percentage
       if(percentage >=91 and percentage <=100):
```

```
            result[i]="Your Grade is A+";
        elif(percentage >=81 and percentage <=90):
            result[i]="Your Grade is A");
        elif(percentage >=71 and percentage <=80):
            result[i]="Your Grade is B+";
        elif(percentage >=61 and percentage <=70):
            result[i]="Your Grade is B";
        elif(percentage >=51 and percentage <=60):
            result[i]=Your Grade is C+";
        elif(percentage >=41 and percentage <=50):
            result[i]="Your Grade is C";
        elif(percentage >=0 and percentage <=40):
            result[i]="Your Grade is F";
        else:
            result[i]="Strange Grade..!!";
for i in num:
        print("Student Name :" + students[i])
        print( "Regression Analysis mark:"+ ": "ra[i])
        •
        •
        •
```

Extra Credits

Calculate over all percentage for your course by calculate all four semester marks