▾ Assignment 1

```
#Link to data set - https://drive.google.com/file/d/10N-dU34GFKcPT9EFufmdNGUBCvXqmUYC/view?usp=sharing

with open('student-dataset.csv', 'r') as file:
    data = file.readlines()
data = [row.strip().split(',') for row in data[1:]]
#print(data)

eng_grade = [float(row[9]) for row in data]
maths_grade = [float(row[10]) for row in data]
science_grade = [float(row[11]) for row in data]
lang_grade = [float(row[12]) for row in data]

def average(a_list):
    sum = 0
    for element in a_list:
        sum += element
    return sum/len(a_list)

def high(a_list):
    high = 0
    for element in a_list:
        if element > high:
            high = element
    return high


def low(a_list):
    low = 6
    for element in a_list:
        if element < low:
            low = element
    return low

def sum(a_list):
    sum = 0
    for grade in a_list:
        sum += grade
    return sum

def per(data):
    for student in data:
        per = (float(student[9])+float(student[10])+float(student[11])+float(student[12]))*5
        print(student[1],'=>', per, '%')

print('total number of students: ', len(data),'\n')
print('mathematics')
print('average', (average(maths_grade)))
print('lowest: ', low(maths_grade))
print('highest: ', high(maths_grade))
print('\n')
print('Language')
print('average', (average(lang_grade)))
print('lowest: ', low(lang_grade))
print('highest: ', high(lang_grade))
print('\n')
print('Science')
print('average', (average(science_grade)))
print('lowest: ', low(science_grade))
print('highest: ', high(science_grade))
print('\n')
print('English')
print('average', (average(eng_grade)))
print('lowest: ', low(eng_grade))
print('highest: ', high(eng_grade))
print('\nstudent percentage\n')
per(data)
```

```
    total number of students:  307

    mathematics
```

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average 3.414332247557003
lowest:  2.1
highest:  4.0


Language
average 4.396416938110749
lowest:  1.0
highest:  5.0


Science
average 3.4465798045602605
lowest:  1.4
highest:  4.0


English
average 3.3697068403908763
lowest:  1.5
highest:  4.0

student percentage

Kiana Lor => 56.5 %
Joshua Lonaker => 73.5 %
Dakota Blanco => 79.5 %
Natasha Yarusso => 71.5 %
Brooke Cazares => 53.50000000000001 %
Rochelle Johnson => 76.0 %
Joey Abreu => 66.0 %
Preston Suarez => 65.5 %
Lee Dong => 63.5 %
Maa'iz al-Dia => 60.0 %
Maja Nicholson => 75.5 %
Sasha Jansen => 71.5 %
Alexander Sherman => 81.5 %
Edgar Sanchez => 76.0 %
Kolbi Strunk => 77.0 %
Brittany Sath => 73.0 %
Meggan Smith => 74.5 %
Ericka Arreola => 67.0 %
David Pulc => 79.0 %
Kyle Luckey => 80.0 %
Rojesh Her => 65.0 %
David Weber => 68.5 %
Rachel Jambor => 80.5 %
Mus'ab al-Moustafa => 67.5 %
Sila Nguyen => 69.0 %
Samantha Hicks => 81.0 %
Angela Harding => 71.0 %
Brandon Barbour => 79.5 %
Reilly Wagar => 76.5 %
Victoria Ibarra => 76.0 %
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✓ 0s   completed at 19:37