

ARPAN ARUN BANDIWADEKAR

D-407

D1

202201090062

ESSENTIALS OF DATA SCIENCE

ASSIGNMENT 1

STUDENT DATASHEET

STUDENT ID	NAME	ENGLISH	MATHS	SCIENCE	SOCIAL STUDIES	MARATHI
401	ALVIN	90	85	87	98	75
402	ANAND	58	75	84	94	79
403	VAISHNAVI	49	94	78	87	68
404	ARHANT	94	87	94	78	87
405	ATHARAV	80	87	68	69	89
406	GANESH	90	65	50	88	97
407	ARPAN URF BHAI	100	100	100	100	100
408	PRATIK	71	75	74	81	93
409	ISHIKA	56	84	77	38	96
410	DHANASHREE	45	67	39	97	76

CODE:

```
with open('STUDENT_DATASHEET.csv', 'r') as file:
```

```
    data = file.readlines()
```

```
data = [row.strip().split(',') for row in data[1:]]
```

```
print(data)
```

```
eng_grade = [float(row[2]) for row in data]
```

```
maths_grade = [float(row[3]) for row in data]
```

```
science_grade = [float(row[4]) for row in data]
```

```
social_studies_grade = [float(row[5]) for row in data]
```

```
marathi_grade = [float(row[6]) 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 sum(a_list):
```

```
    sum = 0
```

```
    for grade in a_list:
```

```
        sum += grade
```

```
    return sum
```

```
def per(a_list):
```

```
    None
```

```
print('English')
```

```
print('average', (average(eng_grade)))
```

```
print('sum',sum(eng_grade))
```

```
print('highest: ', high(eng_grade))
```

```
print('\n')
```

```
print('mathematics')
```

```

print('average', (average(maths_grade)))
print('sum',sum(maths_grade))
print('highest: ', high(maths_grade))
print('\n')
print('Science')
print('average', (average(science_grade)))
print('sum',sum(science_grade))
print('highest: ', high(science_grade))
print('\n')
print('Social Studies')
print('average', (average(social_studies_grade)))
print('sum',sum(social_studies_grade))
print('highest: ', high(social_studies_grade))
print('\n')
print('Marathi')
print('average', (average(marathi_grade)))
print('sum',sum(marathi_grade))
print('highest: ', high(marathi_grade))

```

output:

```

PS C:\Users\Arpan\OneDrive\Desktop\ARPAN BANDIWADEKAR\EDS_ASSIGNMENT_1> &
"C:/Users/Arpan/OneDrive/Desktop/ARPAN BANDIWADEKAR/SEMESTERS/FY SEM2
SUBJECTS/ESSENTIALS OF DATA SCIENCE/python.exe" "c:/Users/Arpan/OneDrive/Desktop/ARPAN
BANDIWADEKAR/EDS_ASSIGNMENT_1/stud_datasheet.py"

```

```

[['401', 'ALVIN', '90', '85', '87', '98', '75'], ['402', 'ANAND', '58', '75', '84', '94', '79'], ['403', 'VAISHNAVI',
'49', '94', '78', '87', '68'], ['404', 'ARHANT', '94', '87', '94', '78', '87'], ['405', 'ATHARAV', '80', '87', '68',
'69', '89'], ['406', 'GANESH', '90', '65', '50', '88', '97'], ['407', 'ARPAN URF BHAI', '100', '100', '100',
'100', '100'], ['408', 'PRATIK', '71', '75', '74', '81', '93'], ['409', 'ISHIKA', '56', '84', '77', '38', '96'], ['410',
'DHANASHREE', '45', '67', '39', '97', '76']]

```

English

average 73.3

mathematics

average 81.9
sum 819.0
highest: 100.0

Science
average 75.1
sum 751.0
highest: 100.0

Social Studies
average 83.0
sum 830.0
highest: 100.0

Marathi
average 86.0
sum 860.0
highest: 100.0

PS C:\Users\Arpan\OneDrive\Desktop\ARPAN BANDIWADEKAR\EDS_ASSIGNMENT_1>