

STUDENTS MARK ANALYSIS

PROGRAM:

Python Program – Student Marks Analysis

Input: Read number of students

```
n = int(input("Enter number of students: "))
```

```
total_marks = 0
```

```
passed_students = 0
```

```
failed_students = 0
```

Process marks using loop

```
for i in range(n):
```

```
    mark = int(input(f"Enter mark of student {i+1}: "))
```

Ensure mark is between 0 and 100

```
if 0 <= mark <= 100:
```

```
    total_marks += mark
```

Classify using if-elif-else

```
if mark >= 40:
```

```
    passed_students += 1
```

```
else:
```

```
    failed_students += 1
```

```
else:
```

```
    print("Invalid mark! Please enter between 0 and 100.")
```

```
    break
```

Calculate average

average_marks = total_marks / n

Output results

print("\n----- Result -----")

print("Total Marks:", total_marks)

print("Average Marks:", average_marks)

print("Passed Students:", passed_students)

print("Failed Students:", failed_students)

Time Complexity: $O(n)$

Space Complexity: $O(1)$

Git Commands Used:

1.cd Downloads

2.cd githubtask

3.cd Naveen---python---training

4.git add .

5.git commit -m "STUDENTS MARK ANALYSIS"

OUTPUT:

Enter number of students: 3

Enter mark of student 1: 100

Enter mark of student 2: 20

Enter mark of student 3: 50

----- Result -----

Total Marks: 170

Average Marks: 56.666666666666664

Passed Students: 2

Failed Students: 1