

Q1

```
PS C:\Users\talha\Documents\DSA Labs\Lab 2> cd
"c:\Users\talha\Documents\DSA Labs\Lab 2\" ; if
($?) { g++ Q1.cpp -o Q1 } ; if ($?) { .\Q1 }
1 3 1 3 1 3 1
3 1 3 1 3 1 3
1 3 1 3 1 3 1
3 1 3 1 3 1 3
1 3 1 3 1 3 1

1 3 1
3 1 3

1 3
3 1
1 3
PS C:\Users\talha\Documents\DSA Labs\Lab 2> 
```

## Q2

```
PS C:\Users\talha\Documents\DSA Labs\Lab 2> cd  
"c:\Users\talha\Documents\DSA Labs\Lab 2\" ; if  
($?) { g++ Q2.cpp -o Q2 } ; if ($?) { .\Q2 }
```

Please enter the data for each student:

Student 1:

Subject 1: 90

Subject 2: 80

Subject 3: 70

Subject 4: 75

Student 2:

Subject 1: 76

Subject 2: 77

Subject 3: 78

Subject 4: 79

Student 3:

Subject 1: 23

Subject 2: 24

Subject 3: 25

Subject 4: 26

Student 4:

Subject 1: 87

Subject 2: 88

Subject 3: 99

Subject 4: 95

Student 5:

Subject 1: 10

Subject 2: 20

```
Student 5:  
Subject 1: 10  
Subject 2: 20  
Subject 3: 30  
Subject 4: 40
```

```
90 80 70 75  
76 77 78 79  
23 24 25 26  
87 88 99 95  
10 20 30 40
```

```
Student 1 Total: 315  
Student 2 Total: 310  
Student 3 Total: 98  
Student 4 Total: 369  
Student 5 Total: 100
```

```
Student 1 Average: 78  
Student 2 Average: 77  
Student 3 Average: 24  
Student 4 Average: 92  
Student 5 Average: 25
```

```
The topper is Student 4 with 369 marks!
```

```
PS C:\Users\talha\Documents\DSA Labs\Lab 2> █
```

## Q3

```
PS C:\Users\talha\Documents\DSA Labs\Lab 2> cd
"c:\Users\talha\Documents\DSA Labs\Lab 2\" ; if
($?) { g++ Q3.cpp -o Q3 } ; if ($?) { .\Q3 }
Enter students in Department 1: 3
Enter students in Department 2: 5
Enter students in Department 3: 7

Please enter the marks for each department:

Department 1:
Marks of Student 1: 99
Marks of Student 2: 98
Marks of Student 3: 75

Department 2:
Marks of Student 1: 56
Marks of Student 2: 58
Marks of Student 3: 89
Marks of Student 4: 67
Marks of Student 5: 45

Department 3:
Marks of Student 1: 10
Marks of Student 2: 20
Marks of Student 3: 30
Marks of Student 4: 40
Marks of Student 5: 50
Marks of Student 6: 60
Marks of Student 7: 70

99 98 75
56 58 89 67 45
10 20 30 40 50 60 70
```

```
99 98 75
56 58 89 67 45
10 20 30 40 50 60 70
```

```
Department 1 Total: 272
```

```
Department 2 Total: 315
```

```
Department 3 Total: 280
```

```
Department 1 Average: 90
```

```
Department 2 Average: 63
```

```
Department 3 Average: 40
```

```
The department with highest marks is Department
2 with 315 marks!
```

```
The department with lowest marks is Department
1 with 272 marks
```

```
PS C:\Users\talha\Documents\DSA Labs\Lab 2> 
```