

Exercise Live Test:

Assignment#1. (30 Mins)

Write the program to check the input string, check the first numeric and return to the caller;

Test case:

1. Input: "Var-----__1_int"
Expect result: "1"
2. Input: "Q2q-q"
Expect result: "2"
3. Input: "eef3243**s"
Expect result: "3"

Assignment#2. (30 Mins)

An IP address is a numerical label assigned to each device (e.g., computer, printer) participating in a computer network that uses the internet protocol for communication. Write the program IP address check if the IP address input is correct or not.

For inputString = "172.16.254.1", the output should be

Test case:

1. Inputstring: "172.316.254.1"
Expect result: true
2. Inputstring:"0.1.1.256"
Expect result: false
3. Inputstring: "1.1.1.1a"
Expect result: false
4. Inputstring: "1"
Expect result: false
5. Inputstring: "64.233.16.00"
Expect result: false
6. Inputstring: "7283728"
Expect result: false

Choose 1 assignment only #3 or #4.

Assignment#3: (60 Mins)

Write the program to rank the football team in the tournament by score. The criteria to calculate score is below.

1. Winning game will get 3 points, the draw game will get 1 point, and the losing game will get 0 point.
2. If the team scores are equal, then apply the logic below for ranking.
 - 2.1 Use the difference of the "Goal For" minus "Goal Against", More different goals will be ranked up.
 - 2.2 If the "Goal For" minus "Goal Against" are equal, more "Goal For" will be ranked up.

Test Case:

Input:

=====

Team, Win, Lose, Draw, Goal For, Goal Against,

A,	5,	1,	2,	23,	20
B,	6,	1,	1,	24,	20
C,	7,	1,	0,	24,	10
D,	6,	1,	1,	15,	11
E,	8,	0,	1,	23,	12

Expect Result:

Team, Goal For, Goal Diff, Score

E,	23,	11,	25
C,	25,	14,	21
B,	24,	4,	19
D,	15,	4,	19
A,	23,	3,	17

Choose 1 assignment only #3 or #4.

Assignment#4: (60 Mins)

Write the program to display students' grades based on input score. The criteria for display grades are below.

Score 0-49 : Grade F

Score 50-59: Grade E

Score 60-69: Grade D

Score 70-79: Grade C

Score 80-89: Grade B

Score 90-100: Grade A

Test Case:

Input:

=====

Student, Score

A, 90

B, 48

C, 63

D, 75

E, 70

Expect Result:

Team, Grade

A, A

B, F

C, D

D, C

E, C