Computer Programming

Lab 12

T.A : Yoo Yeonil, Jeong Wonil

1. Increase and decrease

Input will give a sequence of integers of size N. Write a program that checks if the sequence is increasing, decreasing, constant, dynamic(includes both increasing and decreasing), or other cases. (N : [0 ~ 10000], iN : [-500000 ~ +500000])

[input]
N
i1 i2 i3 … iN

[output]
[“Increasing”, “Decreasing”, “Constant”, “Dynamic”, “Others”]

1. Increase and decrease

[input example]
7
3 3 3 3 3 3 3

[output example]
Constant

[input example2]
4
3 4 3 2
[output example2]
Dynamic

1. Increase and decrease

[input example3]
10
3 4 4 5 5 6 7 8 100 700
[output example3]
Others

2. Increase and Decrease(RPG characters)

Suppose a RPG character has “level” and “exp”. “level” ranges from 1 to 10. “exp” can ranges from 0 to 10 * 2 ^ (level - 1) - 1.

e.g.) “level: 4” => maxExp = 10 * 2^3 = 80, exp’s range: 0 ~ 79.

Both “level” and “exp” are integer values.

The basic task is the same here as with the exercise 1, but you should check validity of a RPG character. If the RPG character’s exp is larger than max exp, you should print error message(“Invalid Input!”) and exit the program.

2. Increase and Decrease(RPG characters)

[input]

N

level1 level2 level3 … levelN

exp1 exp2 … expN

[output]

{The same with exercise1}

2. Increase and Decrease(RPG characters)

[input example]
4
1 3 4 3
11 20 79 37
[output example]
Invalid Input!

[input example2]
4
4 4 4 4
0 11 30 79
[output example2]
Increasing

2. Increase and Decrease(RPG characters)

[input example3]
4
5 3 3 4
1 30 31 0
[output example3]
Dynamic