Hands on Assessment-Python

[Marks:30*2=60]

1. A list rotation consists of taking the last element and moving it to the front. For instance, if we rotate the list [1,2,3,4,5], we get [5,1,2,3,4]. If we rotate it again, we get [4,5,1,2,3]. Write a Python function rotatelist(ls,k) that takes a list ls and a positive integer k and returns the list ls after k rotations. If k is not positive, your function should return ls unchanged. Note that your function should not change ls itself, and should return the rotated list.

Here are some examples to show how your function should work:

rotatelist([1,2,3,4,5], 1) #output is [5, 1, 2, 3, 4]
rotatelist([1,2,3,4,5], 3) #output is [3, 4, 5, 1, 2]
rotatelist([1,2,3,4,5], 12) #output is [4, 5, 1, 2, 3]

2. Define a Python function *alternating(ls)* that returns *True* if the values in the input list alternately go up and down (in a strict manner).

Input:

A series of values separated by comma and a space.

Output:

Either True or False depending on whether the elements are arranged alternatively as per their values.

Sample Input 1:

1,3,2,3,1,5

Sample Output 1:

True

Sample Input 2:

3,2,2,1,5

Sample Output 2:

False