Consider a file named “smooth.py”, containing the following:

def smooth(inlist, h):

""" This function performs a basic smoothing

of inlist and returns the result (outlist).

Both lists have the same length, N. Each

item in inlist is assumed to have type

'float', and 'h' is assumed to be an integer.

For each i, outlist[i] will be the average of

inlist[k] over all k that satisfy

i-h <= k <= i+h and 0 <= k <= N-1.

"""

• Please complete file smooth.py to implement the above function.

• Please aim for good computational complexity (thinking of large h and N).

• Please make this finished code, to your own standard of quality (as if for an employer).

• Please be sure to test your code before sending it to us.

• Please send us your code in a file named “smooth\_py.txt”. (Our mail filters block “.py” attachments.)