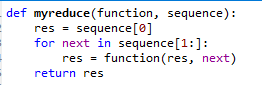
1.1 Write a Python Program to implement your own myreduce() function which works exactly

like Python's built-in function reduce()

**Solution:**

Code:



Input



Result

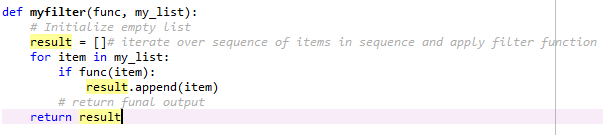


1.2 Write a Python program to implement your own myfilter() function which works exactly like

Python's built-in function filter()

**Solution:**

Code:



Test Case 1: Test With custom function:



Result For Test Case 1:



Test Case 2:



Result For Test Case 2:



2. Implement List comprehensions to produce the following lists.

Write List comprehensions to produce the following Lists

['A', 'C', 'A', 'D', 'G', 'I', ’L’, ‘ D’]

['x', 'xx', 'xxx', 'xxxx', 'y', 'yy', 'yyy', 'yyyy', 'z', 'zz', 'zzz', 'zzzz']

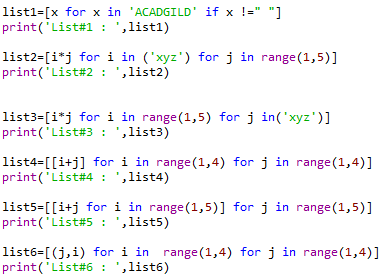
['x', 'y', 'z', 'xx', 'yy', 'zz', 'xxx', 'yyy', 'zzz', 'xxxx', 'yyyy', 'zzzz']

[[2], [3], [4], [3], [4], [5], [4], [5], [6]]

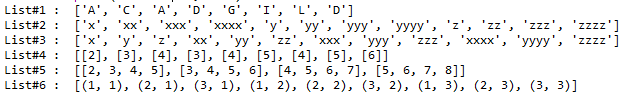
[[2, 3, 4, 5], [3, 4, 5, 6], [4, 5, 6, 7], [5, 6, 7, 8]]

[(1, 1), (2, 1), (3, 1), (1, 2), (2, 2), (3, 2), (1, 3), (2, 3), (3, 3)]

**Solution:**

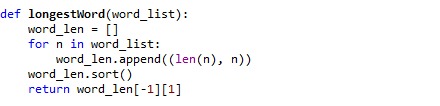


Result:



3. Implement a function longestWord() that takes a list of words and returns the longest one.

**Solution:**



Input & Result:



