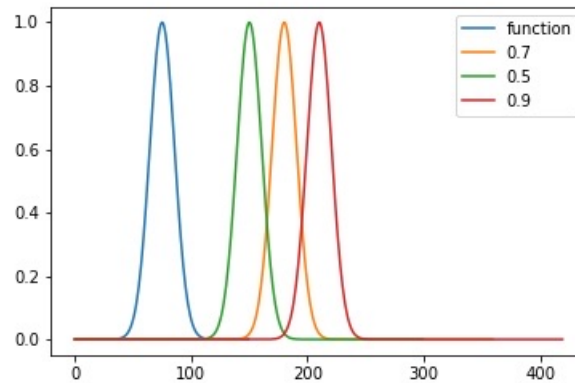


## Problem 4

Graph 1: Correlation function w/ different shifts.



I decided to add  $2 \times \text{shift}$  amount of zeros to make sure there was no wrap.

Thus, length of output array will vary.

for 0.7 : 360  
0.5 : 300  
0.9 : 420

Original function has length 150