

CSE 20
Fall 2020
Quiz 3

Solutions

1. (25 Points) Complete the Python program below that performs the following operations. First prompt the user to input two integers, n and m . If $n < m$, then print the odd positive integers that are less than m (in order, on a single line, separated by spaces). If $n > m$, then print the even positive integers that are less than n (in order, on a single line, separated by spaces). If $n = m$, then print nothing. For instance, if the user enters 5 followed by 10, then the output will be 1 3 5 7 9. If the user enters 10 followed by 5, then the output will be 2 4 6 8.

```
# get input from user
n = int(input('Enter an integer: '))
m = int(input('Enter an integer: '))

# one of many possible solutions

if n<m:
    for i in range(1, m, 2):
        print(i, end=' ')
    # end for
    print()
elif n>m:
    for i in range(2, n, 2):
        print(i, end=' ')
    # end for
    print()
# end if-elif
```

2. (25 Points) Write a Python function with called `rotate(L, i, j, k)`. The function will take as input a list L , three ints i, j, k , and will return nothing. It will alter L as follows: replace $L[i]$ with $L[j]$, replace $L[j]$ with $L[k]$, and replace $L[k]$ with $L[i]$. For instance, if $L = [8, 3, 0, 4, 6, 2]$, then after the function call `rotate(L, 3, 0, 5)`, L will have changed to `[2, 3, 0, 8, 6, 4]`. (Hint: model your answer on the `swap()` function discussed in lecture.)

```
def rotate(L, i, j, k):

    # your code continues here

    temp = A[i]
    A[i] = A[j]
    A[j] = A[k]
    A[k] = temp

# end rotate()
```