

CSE 20 Spring 2020

Quiz 4

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 called `addList(A, B)` that takes two list arguments A and B , each of the same length. Your function will return a new list containing the sums of corresponding elements in A and B . For instance, `addList([1, 2, 4], [2, 5, 7])` will return the list `[3, 7, 11]`. Write your function so that if A and B are not of the same length, then `None` is returned.

```
def addList(A, B):
    if len(A)==len(B):
        C = []
        for i in range(len(A)):
            C.append(A[i]+B[i])
        # end for
        return C      # indentation is important on this line
    # end if
#end addList()
```