

# CSC1015F Assignment 1C

## Introduction

### Assignment Instructions

The questions in this assignment give you practice in typing in and editing programs.

### Question 1 [20 marks]

Retype the following program into a file called `count_odd.py` and test that it runs. The program must be identical, down to the last bit of punctuation, including the spaces at the beginning of some lines!

**Note:** If you copy and paste code, you will most probably have problems submitting it to the Automarker. Furthermore, leave the author of the code as “Stephan Jamieson” as that will be a way of referencing/acknowledging the author. Remember that if we do not acknowledge the author, that constitutes plagiarism.

You may need to create directories as per the instructions in the orientation manual.

```
# Program to count the number of odd numbers entered by the user
# Stephan Jamieson
# 15th February 2024

count = 0

response = input("number:\n")

while response:
    value = int(response)

    if value % 2 == 1:
        print('odd')
        count = count + 1
    else:
        print('even')

    response = input("number:\n")

print('num odd:', count, end='.\n')
```

This program is a classic from Mathematics where we count the number of odd numbers from a set of given numbers. The program keeps asking you to enter a number until you hit “Enter Key” from the keyboard to terminate it. Then the number of odd numbers is printed out.

**Sample Input/Output** (*The input from the user is shown in bold*):

```
number:
33
odd
number:
45
odd
number:
32
even
number:
34
even
number:
67
odd
number:

num odd: 3.
```

## Question 2 [20 marks]

Edit the program from Question one so that the messages printed are more user-friendly. You need to copy the `count_odd.py` file from the first question to a file called `friendly_count_odd.py`.

Change each of the messages printed to the screen to be the same as the example output below.

User-friendliness of programs was a concept that gained popularity in the 1980s, where programs were made easier for human beings to identify with. This has since grown into the current field of Usability Engineering, which you will learn about while studying Computer Science.

***See the sample input/output on the next page.***

**Sample Input/Output** (The input from the user is shown in bold font):

```
Enter a number (or just press enter to quit):
22
That number is even.
Enter a number (or just press enter to quit):
31
That number is odd.
Enter a number (or just press enter to quit):
65
That number is odd.
Enter a number (or just press enter to quit):
77
That number is odd.
Enter a number (or just press enter to quit):
80
That number is even.
Enter a number (or just press enter to quit):
23
That number is odd.
Enter a number (or just press enter to quit):
22
That number is even.
Enter a number (or just press enter to quit):

Okay, the number odd numbers entered is 4.
```

**Submission**

Create and submit to the automatic marker a Zip file called `ABCXYZ123.zip` (where `ABCXYZ123` is YOUR student number) containing `count_odd.py` and `friendly_count_odd.py`.