CSC1015F Assignment 4A (Lab Question)

Control (if, for, while)

Assignment Instructions

THIS QUESTION TO BE COMPLETED DURING YOUR LABORATORY SESSION

This assignment involves constructing Python programs that use input and output statements, `'if'` and `'if-else'` control flow statements, `'for'` and `'while'` control flow statements, and statements that perform numerical manipulation.

Question 1 [30 marks]

A cargo container can hold a maximum of 50 kg. Write a program called `'cargo.py'` that helps a packer meet this requirement.

The program will print the available capacity and will ask for the mass of an item, either accepting it, and updating available capacity, or rejecting it as too big. The program will terminate when the maximum is reached.

Sample I/O:

```
The available capacity is 50.
Enter the mass of the next item:
13
Remaining capacity: 37.
Enter the mass of the next item:
41
That's too big.
Remaining capacity: 37.
Enter the mass of the next item:
20
Remaining capacity: 17.
Enter the mass of the next item:
17
Remaining capacity: 0.
```

(User input is shown in **bold**.)

Submission

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

NOTES:

1. FOLDERS ARE NOT ALLOWED IN THE ZIP FILE.
2. As you will submit your assignment to the Automarker, the Assignment tab will still say "Not Complete" or "In Progress" or something similar. THIS IS COMPLETELY NORMAL. IGNORE IT.