

# Lab 2



## Description

You're presented with a vending machine Python program that has a few deliberate errors. Your tasks are to debug and correct these errors, reverse engineer the pseudo-code from the given script, and provide meaningful comments throughout the corrected code.

```
def vend(item_selected, amount_given):
    if item_selected == "Soda":
        price = 1.5
    elif item_selected == "Chips":
        price = 1.0
    else:
        price = 0.75

    change = amount_given - price

    if change < 0:
        return "Insufficient funds!"
    else:
        return "Thank you for purchasing " + item_selected + ". Your change is " + str(change) + "."

item = input("Choose an item (Soda/Chips/Candy): ")
mony = float(input("Enter the amount given: "))

result = vend(item, money)
print(result)
```

Try to complete all the tasks below.

**Task 1 - Debugging** Spot and rectify any errors in the code. This includes syntactical errors, logical mistakes, and anything that prevents the code from running smoothly.

**Task 2 - Reverse Engineer Pseudo-code** Translate the provided code into pseudo-code. Highlight the major steps and underlying logic of the program.

**Task 3 - Commenting** Insert insightful comments throughout the code, explaining the purpose and functionality of individual lines or blocks of code.

# Assessed Laboratory Work

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## Complete all the tasks above

**Congratulations you completed your first lab**

This assessment amounts to **10%** of assignment 1, marked out of 10.

### Plagiarism & Unfair Practice

Plagiarised work will be given a mark of zero. Remember when you submit you agree to the standard agreement:

This piece of work is a result of my own work except where it is a group assignment for which approved collaboration has been granted. Material from the work of others (from a book, a journal or the Web) used in this assignment has been acknowledged and quotations and paraphrasing suitably indicated. I appreciate that to imply that such work is mine, could lead to a nil mark, failing the module or being excluded from the University. I also testify that no substantial part of this work has been previously submitted for assessment.

### Late Submission & Extensions

Work submitted within one week of the stated deadline will be marked but the mark will be capped at 50%. A mark of 0% will be awarded for any work submitted 1 week after the deadline. Extensions must be applied for using the Request Centre in MyBangor. They must be approved prior to the original deadline.

Acceptable reasons for submitting work late include: Serious personal illness with a doctor's certificate (a self-certified medical note should not be accepted); the death of a relative or close friend; serious family problems such as divorce, separation and eviction. Examples of unacceptable reasons for failing to submit work on time include: having exams; having other work to do; not having access to a computer; having computer related problems; being on holiday; not being able to find information about a subject.

### Feedback

The formal feedback for this assessment will be available post-assessment. Each submission will be provided with comments in their document made available through Blackboard. To access this, see the comments section of your assignment submission. The assessors will attempt to return comments within 2 weeks of submission, however will keep you informed if it needs to extend to the 4 weeks allowed by the University.