Assessment Sheet 1

This is one of eight assessment sheets that you will be given over the duration of this unit. You will need to complete the tasks as outlined below and then document them in a word document. At minimum, you should provide screen shots of:

- Your code
- The output that your code generates

In instances where your code could give different outputs depending on what values it is given, you should provide multiple screen shots of the console screen showing the different outputs to demonstrate that the code is working correctly.

To achieve a D grade

Successful completion of this task (documented in your portfolio) will allow you to achieve up to a D1 grade. Please follow all instructions:

In this task you will write a small program that will calculate how much a parcel delivery service will charge to deliver goods to a customer. This program will take in to account the amount the customer spent and how far (in miles) the carrier will have to travel to deliver the parcel. You should create two variables: **Cost** and **mileage**.
Based on the values stored in these two variables, the program should give the correct fee based on the following rules:

- Delivery is free up to 10 miles, £10 over 10 miles, £15 over 20 miles, £20 over 30 miles

Complete the above task and then document it in your portfolio. Note, to achieve a D

- The write up must demonstrate that the code works
- For a D grade, you only need to provide screen shots of your code and the different outcomes it can give - At this stage you do not need to do any writing
- Your word document should have appropriate headings to ensure that this task can easily be identified alongside the rest of your work.

Continued on the next page

To achieve a C grade

Modify the above program so it now behaves as follows:

- The values contained in the cost and miles variables should now be retrieved from the user
- The code should output the result like this:

You paid: [output cost here]
You are [miles go here] miles away.
The delivery fee is: [calculated delivery fee goes here]
The total cost is: [cost + delivery fee goes here]

Add the modifications to your portfolio

Furthermore, to achieve a C

- The above task should be completed and documented in the portfolio. The portfolio should demonstrate that the code works
- All tasks must be accompanied by written descriptions or annotations. These must show some basic understanding of what the code is doing

To achieve a B grade

Modify the above program (C grade section) so it now behaves as follows:

- Delivery is free up to 10 miles if the value of the goods is over £100, £5 up to 10 miles if the value of the goods is less than £100, £10 over 10 miles, £15 over 20 miles, £15 plus 50p per extra mile over 30 miles

To achieve a B:

- The above task should be completed and documented in the portfolio. The portfolio should demonstrate that the code works
- All tasks must be accompanied by written **explanations** - All new concepts, as they are encountered should be explained. For example, this is your first assessed task sheet to feature variables. Thus, you must explain what a variable is and how it is being used in your code.
  This goes for all other new concepts.
  This is in addition to the C grade tasks where you describe what your code is doing

Continued on the next page

To achieve an A grade

- Your written explanations from the B task should be very detailed

In most assessment sheets, A grade tasks will require some independent research. There are other ways of doing things which you have not been taught in lessons. You will need to look into alternative ways of doing things, demonstrate them and document them in your portfolio.

As this is the first assessment sheet, I will tell you exactly what to look into this time, but future assessment sheets may just state that you should seek alternative approaches

- Look in to **switch statements** and create a small program that demonstrates one (you can re-write a class task or just use your own example)
  Document this in your portfolio and provide a detailed explanation of switch statements along-side
- Please give this section an appropriate heading to ensure it is easy to find.