# Homework 8 Writing to a file Answers

1. Pauline wants to know the difference between the different modes you can use when you open a file using Python. Complete the table to explain it for her.

e.g. file = open("data.txt", "r ")

|  |  |  |
| --- | --- | --- |
| Letter | Stands For | Means |
| r | Read mode | Opens the file so that the program will read from it. No data can be changed in this mode. |
| w | Write mode | Opens the file so that the program will write to it. Beware, opening in this mode will erase the original file. If the file does not exist, it is created. |
| a | Append mode | Opens the file so that new data can be added to the end of it. The existing data cannot be read or edited. If the file does not exist, a new one will be created |

[4 Marks]

1. Martin has written a program but it isn’t producing the results he wanted. All of the data seems to run into one big long line instead of being saved neatly. Try to identify where he has gone wrong and explain to him how to fix the problem.  
     
   file = open("data.txt", "w")  
   again "y "  
   while again = "y":  
    data = input("Enter your data: ")  
    file.write(data + “\n”)  
    again = input("Enter more data? (y/n): ")  
   file.close()  
     
   Explanation:  
   The file object method ‘write()’ will add data to the file, but it won’t automatically start a new line. To do this Martin needs to type the instruction file.write(data + “\n”).

[2 Marks]

1. Sheila has written a program that will add new customer details to her records. When she tested it she had all kinds of problems. Highlight the **three** errors in the code and explain to Sheila what she has done wrong.

file = open("customers.txt ", "a")  
again = "y"  
while again == "y":  
 name = input("Enter customer name: ")  
 dob = input("Enter customer Date of Birth: ")  
 join = input("Enter date customer joined: ")  
 file.write(name + "," + dob + "," + join + "\n")  
 again = input("More data? (y/n): ")  
file.close()

1. Opening the file in write mode will delete the previous records. Use append mode instead.

2. The check in the while loop was looking for again == True, but the user is asked to enter “y” or “n” – so look for a “y” instead.

3. The write() function expects only 1 item, so you can’t use commas to separate them.   
The text will need to be concatenated using the + sign.

[4 Marks]

[Total 10 Marks]