# Python reference sheet

These two programs contain short sections of code to remind you of the syntax for reading, writing, appending and printing text data files

# Writing to a file

**# Reference Sheet Program 1**

**#Demonstrates writing to a text file**

print("This code opens a file for writing")

print("Any data already in the file will be overwritten.")

testfile = open("testfile.txt","w")

numrecs = int(input("How many records do you want to write? "))

for n in range(numrecs):

 firstname = input("Enter first name: ")

 surname = input("Enter surname: ")

 age = input("Enter age: ")

 testfile.write(firstname+","+surname+","+age+"\n")

**#now close the file and open it for reading**

testfile.close()

print("\nReading the newly created file...")

testfile = open("testfile.txt","r")

**#print the whole file**

print(testfile.read())

testfile.close()

# Appending data to a file

**# Reference Sheet Program 2**

**#Demonstrates appending, reading and writing to a text file**

print("This code will append data to an existing file")

print("If there is no file, a new one will be created")

testfile = open("testfile.txt","a")

numrecs = int(input("How many records do you want to write? "))

for n in range(numrecs):

 firstname = input("Enter first name: ")

 surname = input("Enter surname: ")

 age = input("Enter age: ")

 testfile.write(firstname+","+surname+","+age+"\n")

**#Close the file and open it for reading**

testfile.close()

print("\nReading the newly created file...")

testfile = open("testfile.txt","r")

**#Print the whole file in one go**

print(testfile.read())

testfile.close()

**#Now print the file one line at a time**

testfile = open("testfile.txt","r")

**#First read the whole file into a list using the readlines method**

lines = testfile.readlines()

**#Print the whole list**

print("Here is the whole file printed out from a list")

print("It doesn't look very nice")

print (lines)

**#Now print one line at a time**

**#first find out how many records there are in the file**

**#and print one line at a time**

numRecs = len(lines)

**#Close the file and reopen for reading from the beginning**

testfile.close()

testfile = open("testfile.txt","r")

print("\nThere are ",numRecs," records in the file\n")

for line in range(numRecs):

 nextrec = testfile.readline()

 print(line,nextrec)

testfile.close

**#Now split the data into separate fields and print just the firstname and surname**

testfile = open("testfile.txt","r")

print("\nThis will print just the first name and surname fields")

for line in range(numRecs):

 nextrec = testfile.readline()

 data = nextrec.split(",")

 print(data[0],data[1])

testfile.close