

CSV Files

Look at the following program:

```
import csv

def inputRecord():
    newName = input("Enter name: ")
    newAge = int(input("Enter age: "))
    newStarSign = input("Enter star sign: ")
    newRecord = newName+","+str(newAge)+","+newStarSign+"\n"
    return newRecord

def createNewFile():
    file = open("stars.csv","w")
    for count in range(0,3):
        newRecord = inputRecord()
        file.write(newRecord)
    file.close()

def appendToFile():
    file = open("stars.csv","a")
    newRecord = inputRecord()
    file.write(newRecord)
    file.close()

def printFile():
    file = open("stars.csv","r")
    print(file.read())
    file.close()

createNewFile()
appendToFile()
printFile()
```

Now create a new file for each of the following programs and use subprograms whenever possible. Save them with the names provided so you can find them again in the future.

Program 1

Create a CSV file which will store the student name and their test mark as follows:

	A	B	
1	Sam	75	
2	Tom	48	
3	Alex	61	
4	Ella	67	
5	Aiden	83	
6			

Save the program with the name **CSVFileTest**.

Program 2

Using the same CSV file you created in program 1, ask the user to input a new name and test score and add that to the end of the CSV file. Display the contents of the file in the shell window. Save the program with the name **CSVFileAppendRead**.

Program 3

You are going to create a CSV file that will store the user ID and password of employees in an organisation. Your CSV file should start by storing the following data.

	A	B	
1	jsmith	5\$!9NrYBc0	
2	mmorgan	0nf4Sig8	
3	wpatel	Vt04Efc57ys	
4	ksaitch	2fyF&wk8k{	
5	ahenderson	IP76f{8wFyf	
6	vallan	csirPlcfw377y	
7	ndonaldson	{4yV6msy	
8			

Create a menu which will ask the following:

- 1) Enter new record
 - 2) Display list
 - 3) Quit
- Enter your selection:

If they enter 1 it should generate a new User ID and password for them. It should ask for the first name and surname and then convert that into a user ID so it only includes their first initial and surname all in lowercase. It should then pick the number of characters for the password (between 8 and 12) and then pick the random characters from a long list of lowercase letters, uppercase letters, symbols and numbers which should be combined to make their password. This should then be added to the end of the csv file.

You should also ensure the rest of the menu options work correctly.

Save the program with the name **CSVFilePasswords**.

