Identity data

In this code, we build a data record composed of name, email and phone number and append it to a CSV file.

```
# PC1410 Identity data
# Name and School:

print("Enter your name, email address and phone number")

firstName = input("Enter your first name : ")
surName = input("Enter your surname : ")
```

i) Change the code given so that it prints the message "Please enter your Irish phone number, <name>" .

Sample output could look like this:

```
Enter your name, email address and phone number
Enter your first name : Tom
Enter your surname : Murphy
Please enter your Irish phone number, Tom : 092 2347621
```

ii) Process the phone number as follows:

Allow the user to enter digits 0-9, brackets and spaces. Ask the user to re-enter the phone number if it contains any other characters.

Then:

- Strip out any blanks or brackets, leaving only digits 0-9
- Remove a leading zero if it exists
- Add "+353" at the start of the number.

| 087-3333333 | Invalid (hyphen) |
|--------------|-------------------------|
| (087)3333333 | Change to +353873333333 |
| 18778987 | Change to +35318778987 |
| Num 08787778 | Invalid (letters) |
| 086 453 7721 | Change to +353864537721 |

iii) Now modify the code so that the user is asked for an email address. Keep asking the user to enter an email address if the address entered isn't valid.

The validity rules for an email address are as follows

- Must contain one @ (and only one @)
- Must have characters before the @ which can be numbers, letters, (hyphen),
 _(underscore)
- Must have a dot in the characters after the @
- The domain name just after the @ should contain only numbers, letters, (hyphen),
 _(underscore)
- If there are multiple dots, the higher level domains have the same restrictions (eg amazon.co.uk)
- The final high-level domain should be letters only and can be 2 or 3 characters long only

| Tom*murphy@mail.com | Invalid (*) |
|----------------------------------|---------------------------|
| Tom@murphy@mail.com | Two @s |
| 437893@r^3.com | Illegal char in domain ^ |
| name@mail.room.up.stairs.i | Invalid high level domain |
| Tommurphy@mail_room.up.stairs.ie | Valid |

After entering all data validly, the output should look like this:

```
Enter your name, email address and phone number
Enter your first name: Tom
Enter your surname: Murphy
Please enter your Irish phone number, Tom: 086 2233444
Please enter your email address: tom.murphy@mydomain.ie
Thank you, Tom. Your data as been stored
```

iv) You now have a valid name, phone number and email address. Create a comma separated string and write this string to a file called "PC1410CustData.csv".Your string should have the formal e.g.

"Tom, Murphy, +35386223344, tom.murphy@mydomain.ie"

Write it in such a way that if you run this program multiple times, the data will be appended, not overwritten. This is a sample CSV file view using Notepad.

