Year 12 A-Level Computer Science Bridge Work

At A-Level the complexity of programming takes a big jump especially when you begin to undertake the huge task of a programming project trying these challenges will hopefully allow you to keep your python skills ticking over.

Create programs for each of the following challenges in Python using an IDE of your choice, once created screen shot your code and paste it into this document under the respective challenge.

Challenge 1:

Define a subprogram that will ask the user to enter a number and save it as the variable "num". Define another subprogram that will use "num" and count from 1 to that number.

Challenge 2:

Create a program that will allow the user to easily manage a list of names.

You should display a menu that will allow them to

* add a name to the list
* change a name in the list
* delete a name from the list
* view all the names in the list.

There should also be a menu option to allow the user to end the program.

If they select an option that is not relevant, then it should display a suitable message.

After they have made a selection to either add a name, change a name, delete a name or view all the names, they should see the menu again without having to restart the program.

The program should be made as easy to use as possible. Make a robust program, anticipate misuse.

Challenge 3:

Create the following menu:

1. Add to file
2. View all records
3. Quit program

Enter the number of your selection:

If the user selects 1, allow them to add to a file called Salaries.csv which will store their name and salary.

If they select 2 it should display all records in the Salaries.csv file.

If they select 3 it should stop the program. If they select an incorrect option they should see an error message. They should keep returning to the menu until they selection option 3.

**Extension**

Change the previous program to allow you to do delete a record. Your menu should now look like this.

1. Add to file
2. View all records
3. Delete a record
4. Quit program

Enter the number of your selection:

Challenge 4:

