

CS118 Program

Database

Write a simple database program in Python. There are three functions: `AddRecord()`, `DelRecord()`, and `FindRecord()`.

Your main program provides a menu of three options:

- A. Add a new record
- D. Delete a record
- X. Exit the program

The menu is provided to the user until s/he chooses to exit the program. When "A" or "a" is chosen, the `AddRecord()` function is executed. When "D" or "d" is chosen, the `DelRecord()` function is called. If an invalid menu option is chosen, have the user choose again. Maintain a database of your choice – say, classes you've taken, or friends' names. Maintain the database as a list in the main program.

`AddRecord()` collects information for a new record from the user and appends that new record to the database. It receives one argument, the database list, and returns nothing.

`FindRecord()` receives two arguments: the database list and the item being located. If the item is located in the database, `FindRecord()` should return its index, otherwise, it should return -1.

`DelRecord()` receives one argument (the database list) and returns an error string. It will ask the user for the information being deleted then call the `FindRecord()` function which will locate the desired record in the list and return its index. Upon return from the `FindRecord()` function, `DelRecord()` will delete the located record and return a string stating successful deletion; but if the information is not found in the database, `DelRecord()` will return a string stating that the item was not found.

```
>>>
A. Add a new record
D. Delete a record
X. Exit the program
Your choice? a
Name to add: Fred

A. Add a new record
D. Delete a record
X. Exit the program
Your choice? a
Name to add: Bert

A. Add a new record
D. Delete a record
X. Exit the program
Your choice? a
Name to add: Joe

A. Add a new record
D. Delete a record
X. Exit the program
Your choice? d
Name to delete: Ed
Error deleting "Ed" - item not found

A. Add a new record
D. Delete a record
X. Exit the program
Your choice? d
Name to delete: Bert
Success deleting "Bert"

A. Add a new record
D. Delete a record
X. Exit the program
Your choice? x
Now exiting the program...
```