```
def show menu():
                                                                                                                Section 1 Create a Menu
    choice = input("""
                              Main Menu
    1) Add new Address
     2) Existing Address
    3) Veiw all Address where lastname start with letter
    4) List All Address
    5) Quit
                                                                                                        ### it will show the user what to choice from the
mian menu
    try
        choice = int(choice)
                                                                                                         ### I use try and except if there is any error
    except:
may occur and want to do something instead.
        choice = 0
    return choice
                                                                                                        #### it will return us to the choice
def new_address():
data = {}
value pairs and it make it easy to change in Section 3
                                                                                        ## that is Dictionaries are used to store data values in key:
    Add = True
    data["firstname"] = input("Enter firstname: ")
                                                                                         ## i used true and false to make sure They do not make the
    st name and last name empty if they are empty it will print no name added if data["firstname"] == "":
        Add = False
         print("No Name Added")
         return data.Add
    data["lastname"] = input("Enter lastname: ")
     if data["lastname"] == "":
        Add = False
         print("No Name Added")
        return data.Add
    data["address1"] = input("Enter address1 : ")
    data["address2"] = input("Enter address2 : ")
    data["address3"] = input("Enter address3 : ")
    data["address4"] = input("Enter address4 : ")
    data["postcode"] = input("Enter postcode : ")
    data["stdCode"] = input("Enter stdCode : ")
    data["telephone"] = input("Enter telephone : ")
    return data.Add
def change address(old Data):
    new_data = {}
                                                                                                          ## The new data it will be for the new data the
    are going to enter
    Add = True
    lastname_List = []
    lastname = input("Enter lastname to be changed: ")
    for data in old Data:
                                                                                                                   ## It's going to compare the last name
in the old data with the new last name is going to be into from the user
        lastname_List.append(data["lastname"])
    if lastname in lastname_List:
        new_data["address1"] = input("Enter address1 : ")
new_data["address2"] = input("Enter address2 : ")
         new_data["address3"] = input("Enter address3 : ")
         new_data["address4"] = input("Enter address4 : ")
         new_data["postcode"] = input("Enter postcode: ")
         new_data["stdCode"] = input("Enter stdCode : ")
         new_data["telephone"] = input("Enter telephone : ")
                                                                                                                               # old_Data = [{},{},{},...]
# data = {"lastname":"...."
         for data in old Data:
firstname":
             if data['lastname'] == lastname:
                  data['address1'] = new_data["address1"]
                  data['address2'] = new_data["address2"]
                  data['address3'] = new_data["address3"]
                  data['address4'] = new_data["address4"]
                  data["postcode"] = new_data["postcode"]
                  data["stdCode"] = new_data["stdCode"]
                 data["telephone"] = new_data["telephone"]
                                                                                                                               ### If the last name was not
found in the list of the dictionary it will print last name was not correct
        print("lastname is not correct")
    return old Data
def view_lastname(old_Data):
    firstletter = input("Enter first letter of lastname: ")
                                                                                                                                            ### By entering
the The first letter of the last name it will show all the data been stored for the person
    for data in old Data:
                                                                                                                                      ###for loop
        if data["lastname"].startswith(firstletter):
                                                                                              ### Start with is a function that see the first letter and
compare it with what you want To make sure it is the same letter you have entered before
             print("firstname:
print("lastname:
                                  { } ".format(data["firstname"]))
{ } ".format(data["lastname"]))
             print("address:
                                  {}".format(data["address1"]))
                                  {}".format(data["address1"]))
{}".format(data["address2"]))
{}".format(data["address3"]))
             print("
             print("
                                                                                                                  ## It will print all the details of the
person was entered his first letter from his last name
print(" {}".format(data["address
                                  {}".format(data["address4"]))
{}".format(data["postcode"]))
{}".format(data["stdCode"]))
             print("postcode:
             print("stdCode:
             print("telephone: {}".format(data["telephone"]))
def view_all(old_Data):
    for data in old_Data:
                                                                            ### It will print all the data been into and this application been changed
        print("firstname : {}" .format(data["firstname"]))
print("lastname : {}" .format(data["lastname"]))
        print("lastname :
print("address :
                               {}" .format(data["address1"]))
         print("address
                                } " .format(data["address2"]))
         print("
         print("
                               {}" .format(data["address3"]))
                                                                                         ### It will print all details in the dictionary
                              {} " .format(data[ "address4"]))
{} " .format(data[ "postcode"]))
         print("postcode :
        print("stdCode : {}" .format(data["stdCode"]))
print("telephone : {}" .format(data["telephone"]))
def Save_Data(Data):
    File = open("Data.txt", "w")
                                                   ##It will open a file and save everything the user input and that will save it in that file
    Data = str(Data)
                                                   ##It will save any numbers or letters to the file string
    File.write(Data)
```

choice = show menu()

```
Data = []
lastname":"..."},(},()....]
while choice != 5:
   if choice not in [1,2,3,4]:
        print("input not recognised. please try again...")
   elif choice == 1:

        data,Add = new_address()
        if Add:
            Data.append(data)
   elif choice == 2:
        Data = change_address(Data)
   elif choice == 3:
        view_lastname(Data)
   elif choice == 4:
        view_all(Data)
        choice = show_menu()
Save_Data(Data)
   when the user guit
```

```
### Section 1 Create a Menu
# data = {"firstname":"...","lastname":"..."}
### Section 2 Entering and Changing Data
# Will back
### Section 3 Displaying the Entered Data
### Section 4 Software Development Protocols
### Everything will be Saved to the data file
```

#Data = [{"firstname":"...","