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import pickle
import contact
import cellphone
def main():
    CONTACTS = 1
    CELLPHONE = 2
    QUIT = 3
    choice= 0
    while choice != QUIT:
        choice = main_menu_choice()
        if choice == CONTACTS:
            contact_main()
        elif choice == CELLPHONE:
            cellphone_main()
    print('Multi-purpose program ending')
def main_menu_choice():
    CONTACTS = 1
    CELLPHONE = 2
    QUIT = 3
    print()
    print('MENU')
    print('-----')
    print('1. Manage Contacts')
    print('2. Manage Phone Inventory')
    print('3. Quit the program')
    print()
    choice = int(input('Enter your choice: '))
    while choice < CONTACTS or choice > QUIT:
        choice = int(input('Enter a valid choice: '))
    return choice
def contact_main():
    LOOK_UP = 1
    ADD = 2
    CHANGE = 3
    DELETE = 4
    QUIT = 5
    mycontacts = load_contacts()
    choice = 0
    while choice != QUIT:
        choice = contact_menu_choice()
        if choice == LOOK_UP:
            look_up(mycontacts)
        elif choice == ADD:
            add(mycontacts)
        elif choice == CHANGE:
            change(mycontacts)
        elif choice == DELETE:
            delete(mycontacts)
    save_contacts(mycontacts)
def load_contacts():
    FILENAME = 'contacts.txt'
    try:
        input_file = open(FILENAME, 'rb')
        contact_dct = pickle.load(input_file)

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        input_file.close()
    except IOError:
        contact_dct = {}
    return contact_dct
def contact_menu_choice():
    LOOK_UP = 1
    QUIT = 5
    print()
    print('MENU')
    print('-----')
    print('1. Look up contact')
    print('2. Add a new contact')
    print('3. Change an existing contact')
    print('4. Delete a contact')
    print('5. Quit the program')
    print()
    choice = int(input('Enter your choice: '))
    while choice < LOOK_UP or choice > QUIT:
        choice = int(input('Enter a valid choice: '))
    return choice
def look_up(mycontacts):
    name = input('Enter a name to find: ')
    print(mycontacts.get(name, 'That name is not found.'))
def add(mycontacts):
    name = input('Name: ')
    phone = input('Phone: ')
    email = input('Email: ')
    entry = contact.Contact(name, phone, email)
    if name not in mycontacts:
        mycontacts[name] = entry
        print('The entry has been added')
    else:
        print('The entry already exists.')
def change(mycontacts):
    name = input('Enter a name: ')
    if name in mycontacts:
        phone = input('Enter the new phone number: ')
        email = input('Enter the new eail address: ')
        entry = contact.Contact(name, phone, email)
        mycontacts[name] = entry
        print('Contact information updated for: ', name)
    else:
        print('The name %s is not found in the contact list.' %name)
def delete(mycontacts):
    name = input('Enter a name: ')
    if name in mycontacts:
        del mycontacts[name]
        print('%s has been deleted from the contract list.' %name)
    else:
        print("The name %S is not found in the contact list." %name)
def save_contacts(mycontacts):
    FILENAME = 'contacts.txt'
    output_file = open(FILENAME, 'wb')
    pickle.dump(mycontacts, output_file)

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        output_file.close()
def cellphone_main():
    phones = make_list()
    print('Here is the data that you entered')
    display_list(phones)
def make_list():
    phone_list = []
    print('Enter data for five phones')
    for count in range(1, 6):
        print('Phone number ' + str(count) + ':')
        man = input('Enter the manufacturer: ')
        mod = input('Enter the model number: ')
        retail = float(input('Enter the retail price: '))
        print()
        phone = cellphone.CellPhone(man,mod,retail)
        phone_list.append(phone)
    return phone_list
def display_list(phone_list):
    for item in phone_list:
        print(item.get_manufact())
        print(item.get_model())
        print(format(item.get_retail_price(), '.2f'),sep='')
        print()
main()

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