**import** pickle  
**import** os  
  
**def** DisplayMenu() -> **None**:  
 print(**"1. Kayıtları Listele"**)  
 print(**"2. Kayıt Ara"**)  
 print(**"3. Kayıt Ekle"**)  
 print(**"4. Kayıt Sil"**)  
 print(**"5. Çıkış"**)  
 print()  
  
  
**def** MenuLoop() -> str:  
 **while True**:  
 DisplayMenu()  
 option=input(**"Seçenek (1-5): "**)  
 print(**"\n"**)  
 **if** option.isdigit() **and** 1 <= int(option) <=5:  
 **break  
 return** option  
  
  
**def** MainLoop() -> **None**:  
 **while True**:  
 option=MenuLoop()  
 **if** option == **"1"**:  
 ListRecords()  
 **elif** option == **"2"**:  
 SearchRecord()  
 **elif** option == **"3"**:  
 AddRecord()  
 **elif** option == **"4"**:  
 DeleteRecord()  
 **elif** option == **"5"**:  
 **break  
  
  
def** ListRecords() -> **None**:  
 recordsList = ReadFile()  
 print(**f"Kayıt Sayısı: {**len(recordsList)**}\n"**)  
 print(**f"{'İsim':^10} {'Soyisim':^10} {'Telefon':^11}"**)  
 **for** record **in** recordsList:  
 print(**f"{**record.get(**'name'**, **' '**)**:10.10} {**record.get(**'surName'**, **' '**)**:10.10} {**record.get(**'telNumber'**, **' '**)**:11.11}"**)  
 print()  
  
  
**def** SearchRecord() -> **None**:  
 print(**"Kayıt Arama"**)  
 name = input(**"İsim: "**)  
 surName = input(**"Soyisim: "**)  
 recordsList = SearchRecordFromFile(name, surName)  
 print(**"Telefon Numarası: "**, end=**' '**)  
 **for** record **in** recordsList:  
 print(**f"{**record.get(**'telNumber'**)**:11.11}"**, end=**''**)  
 print(**"\n"**)  
  
**def** AddRecord() -> **None**:  
 print(**"Yeni Kayıt Ekle"**)  
 name = input(**"İsim: "**)  
 surName = input(**"Soyisim: "**)  
 telNumber = input(**"Telefon Numarası: "**)  
 print(**f"Yeni Kayıt: {**name**} {**surName**} - {**telNumber**}"**)  
 **if** AreYouSure():  
 AddRecordToFile(name, surName, telNumber)  
 print(**"Kayıt Eklendi\n"**)  
  
  
  
**def** DeleteRecord() -> **None**:  
 print(**"Kayıt Silmek"**)  
 name = input(**"İsim: "**)  
 surName = input(**"Soyisim: "**)  
 recordsList = SearchRecordFromFile(name, surName)  
 print(**"Telefon Numarası: "**, end=**' '**)  
 **for** record **in** recordsList:  
 print(**f"{**record.get(**'telNumber'**)**:11.11}"**, end=**''**)  
 print(**"\n"**)  
 **if** AreYouSure():  
 DeleteRecordsFromFile(recordsList)  
 print(**"Kayıt Silindi\n"**)  
  
  
  
**def** AreYouSure() ->bool:  
 **while True**:  
 answer = input(**"EminMisiniz? (E)vet/(H)ayır"**)  
 print()  
 **if** answer.upper() == **"E"**:  
 **return True  
 elif** answer.upper() == **"H"**:  
 **return False  
  
  
  
def** ReadFile() -> list:  
 **if** os.path.isfile(**"data.bin"**):  
 **with** open(**"data.bin"**, **"rb"**) **as** fileObject:  
 recordList = pickle.load(fileObject)  
 **else**:  
 recordsList = list()  
 **return** recordsList  
  
  
**def** WriteFile(recordListParam : list) -> **None**:  
 **with** open(**"data.bin"**, **"wb"**) **as** fileObject:  
 pickle.dump(recordListParam, fileObject)  
  
**def** SearchRecordFromFile(nameParam : str, surNameParam : str) ->list:  
 recordsList = ReadFile()  
 responseList = list()  
 **for** record **in** recordsList:  
 **if** record.get(**"name"**).upper() == nameParam.upper() **and**\  
 record.get(**"surName"**).upper() == surNameParam.upper():  
 responseList.append(record)  
 **return** responseList  
  
  
  
**def** AddRecordToFile(nameParam : str, surNameParam : str, telNumberParam : str) -> **None**:  
 recordList = ReadFile()  
 recordDict = dict(name = nameParam, surName = surNameParam, telNumber = telNumberParam)  
 recordList.append(recordDict)  
 WriteFile(recordList)  
  
**def** DeleteRecordsFromFile(recordsListParam : list) -> **None**:  
 recordsList = ReadFile()  
 **for** record **in** recordsList:  
 **for** recordForDelete **in** recordsListParam:  
 **if** record.get(**"name"**) == recordForDelete.get(**"name"**) **and** \  
 record.get(**"surName"**) == recordForDelete.get(**"surName"**):  
 recordsList.remove(recordForDelete)  
 **continue** WriteFile(recordsList)  
  
  
MainLoop()