Mobile phone

1

```
import java.util.ArrayList;

public class MobilePhone {
    private String myNumber;
    private ArrayList<Contact> myContacts;

    public MobilePhone(String myNumber) {
        this.myNumber = myNumber;
        this.myContacts = new ArrayList<>();
    }

    public boolean addNewContact(Contact contact) {
        if (findContact(contact) >= 0) {
            System.out.println("Contact already exists.");
            return false;

        }
        myContacts.add(contact);
        return true;
    }

    public boolean updateContact(Contact oldContact, Contact newContact) {
        int position = findContact(oldContact);
        if (position < 0) {
            System.out.println(oldContact.getName() + " was not found.");
            return false;
        }
```

```
    myContacts.set(position, newContact);
    System.out.println(oldContact.getName() + " was replaced with " + newContact.getName());
    return true;
}

public boolean removeContact(Contact contact) {
    int position = findContact(contact);
    if (position < 0) {
        System.out.println(contact.getName() + " was not found.");
        return false;
    }
    myContacts.remove(position);
    System.out.println(contact.getName() + " was removed.");
    return true;
}

private int findContact(Contact contact) {
    return myContacts.indexOf(contact);
}

private int findContact(String contactName) {
    for (int i = 0; i < myContacts.size(); i++) {
        Contact contact = myContacts.get(i);
        if (contact.getName().equals(contactName)) {
            return i;
        }
    }
    return -1;
}
```

```
    public Contact queryContact(String contactName) {
        int position = findContact(contactName);
        if (position >= 0) {
            return myContacts.get(position);
        }
        return null;
    }

    public void printContacts() {
        System.out.println("Contact List:");
        for (int i = 0; i < myContacts.size(); i++) {
            Contact contact = myContacts.get(i);
            System.out.println((i + 1) + ". " + contact.getName() + " -> " + contact.getPhoneNumber());
        }
    }
}
```

2 contacts

```
public class Contact {
    private String name;
    private String phoneNumber;

    public Contact(String name, String phoneNumber) {
        this.name = name;
        this.phoneNumber = phoneNumber;
    }
```

```
    public String getName() {
        return name;
    }

    public String getPhoneNumber() {
        return phoneNumber;
    }

    public static Contact createContact(String name, String phoneNumber) {
        return new Contact(name, phoneNumber);
    }
}
```