Set up process:

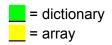
- Hello message, for example, "Hi I'm smartie and I'm going to help you set up your smartie connect environment today"
- Personal information
- 1. Message: "Hi, insert your first name:"
- 2. Message: "Hi <user name>, please enter your surname"
- Inserting services: "Perfect, now we are going to register your devices in your smartie home"
- 1. Message: Insert the name of the room the new device is located in, these are the rooms you have already registered:
 - a. Room 1
 - b. Room 2
 - c. Living room
 - d. Room 4
 - e. New Room
 - Message: "Insert the name of the new room"
- 2. Message: "Name this device, this name will be used to manage the device through commands:" (give an error if a device with the same name already exists and make them rename it)
- 3. Message: "Please enter the first type of device you want to register, these are the possible options
 - a. Heater
 - b. Speaker
 - c. Smoke and Co2 sensors
 - d. Front door manager
 - e. Windows and door monitors
 - f. Light
- 4. If the user entered a heater device, we will need to know the preferred temperature range

Message: "At how many degrees should this heater turn on (in celsius)?" Message: "At how many degrees should this heater turn off (in celsius)?"

- 5. Message: "The device has been created, do you have any other devices you'd like to add?"
 - a. Yes: repeat steps 1 to 4
 - b. No: end set up process
- Tutorial
- 1. Message: "if you don't remember the commands to use just type "Hi Smartie", "help" or "?" and I'll give you a list together with the names associated with your devices"

Once the setup process is done, all the data should be in a JSON file

JSON file- will contain a dictionary





```
Name: <name of user>,
Surname: <surname of user>,
Rooms: array containing room dictionaries
       [Room 1 = {
              Name: <room name>,
              Devices: array containing devices variables (which are dictionaries)
                     Device 1=
                            {Device name: <device name>,
                            Device type: <device type>,
                           },
                     Device 2=
                            {Device name: <device name>,
                            Device type: ex. Heater,
                            Min temperature: <minTemperature>
                            Max temperature: <maxTemperature>
                            },
                     Device 3 =
                            {Device name: <device name>,
                            Device type: <device type>,
                            },
                     ],
       Room 2 = {
              Name: <room name>,
              Devices: array containing devices variables (which are dictionaries)
                     Device 4=
                            {Device name: <device name>,
                            Device type: ex. Heater,
                            Min temperature: <minTemperature>
                            Max temperature: <maxTemperature>
                     Device 5 =
                            {Device name: <device name>,
                            Device type: <device type>,
                            },
                    ],
       }
       ]
}
Example of json structure
dict_var = {
       'name': 'Barack',
       'Surname': 'Obama',
       'Rooms': Rooms_array,
}
Rooms_array = [Room1, Room 2]
```

```
Room1 = {'name' : 'bedroom', 'devices' : Room1_devices_array}

Room2 = {'name': 'Kitchen', ''devices': Room2_devices_array}

Room1_devices_array = [Device1, Device2]

Room2_devices_array = [Device3]

Device1 = {'name' : 'bedroom heater', type: 'Heater', 'lowest temp' : 18, 'highest temp' : 25'}

Device2 = {'name': 'bedroom lamp', type: 'Light"}

Device3 = {'name': 'ikea light', 'type': 'light'}
```

Commands:

- 1. "Hi Smartie", and "help", and "?": Gives a list of all the possible command with their description and all the device names
- 2. "Lock house": tells main to turn on security calls "main.lock_house()"
- 3. "Unlock house": tells main to turn off security calls "main.unlock house()"
- 4. "Turn on heater <HeaterName>": tells main to turn on heating run func "main.turn_on_heater(<HeaterName>)"
- 5. "Turn off heater <HeaterName>": tells main to turff on heating run func "main.turn_off_heater(<HeaterName>)"
- 6. "Turn on light <LightName>": tells main to turn on lights run func "main.turn_on_light(<LightName>)"
- 7. "Turn off light <LightName>": tells main to turn off lights run func "main.turn_off_light(<LightName>)"
- 8. "Set an alarm in Room <RoomName> for <time>" run func main.set alarm(<RoomName>, <time>)
- 9. "Set a timer Room <Roomname> for <minutes>": runs func main.set_timer(<RoomName>, <minutes>)