

## Lesson 9 Auto run program

### Configuring Auto-run Program

- This tutorial only introduces the methods for configuring auto-run for the Adeept Robot; for more details of auto-run on Raspberry Pi, refer to the document [Auto-Run](#) by itechfy: <https://www.itechfy.com/tech/auto-run-python-program-on-raspberry-pi-startup/>
  - If you have installed the dependent libraries, the script program is already configured to auto-run. Here we will explain how to configure from scratch.
1. First, type in the code to create a file *startup.sh*:

```
sudo touch //home/pi/startup.sh
```

2. Edit the startup.sh file:

```
sudo nano startup.sh
```

3. Write the following code into the startup.sh file. Insert next to python3 the program to auto run, and enter the file name of your product for [RobotName]. Note that you should use an absolute path here. We take the webServer.py for example:

```
#!/bin/sh  
sudo python3 //home/pi/adeept_roboticarm/4_arm.py
```

4. Press Ctrl + X to exit editing, press Y to save your changes, and press Enter to confirm exit.
5. Grant permission for startup.sh, in which **\*\*\*** is the code for Linux permission. We do not suggest using the permission **777**, yet it can help novice with user account and permission problems. You can also set it as 700 so only the owner can read, write, and run startup.sh. To learn more about the Linux permissions, refer to the article [Understanding File Permissions](#) by maketechasier:

<https://www.maketecheasier.com/file-permissions-what-does-chmod-777-means/>

```
sudo chmod 777 //home/pi/startup.sh
```

6. Edit the rc.local file to configure the auto-run script

```
sudo nano /etc/rc.local
```

7. Add the line below to the file of the rc.local file, save and exit:

```
//home/pi/startup.sh start
```

- You can also replace the script path above to any other script to auto-run.