**Home Automation**

**Basic Home Automation Project with Flask and Raspberry Pi**

As a test, we connect LEDs with GPIO 23, 24, 25, 26, with resistances of 330 ohm in series to avoid burning them. The code can be optimized but this is just a basic example to mount a mini home automation server with a Raspberry Pi. You can control any type of more power-demanding devices such as light bulbs, fluorescent lights, etc.

To mount the project, follow these steps:

**1. Flask framework installation with pip, with the following command:**

a. pip3 install Flask *(for python version 3)*

**2. Download the code with this command:**

a. git clone <https://github.com/WilliBobadilla/Domotica.git>

**3. Access the directory where the app.py file is located:**

a. cd Domotica *(it will depend on where you have downloaded the file)*

**4. Input the next command into the Terminal, this is to make Flash, the framework, recognize it as the main file for our server:**

a. export FLASK\_APP=app.py *(for Linux environments)*

b. set FLASK\_APP=app.py *(for Windows environments)*

**5. Once in the directory where the app.py file is located, run the server. To make it visible in the local network, use the next command:**

a. flask run *(to run the server locally, it can only be accessed in the computer where it is actually running)*

b. flask run --host=ip\_rpi *(in this case, for example, if your IP is 192.168.1.121, the command should be “flash run --host=192.168.1.121”)*