**FLASH READY-TO-USE ESP32 BINARY (IN WINDOWS)**

**Step 0: download** [**esptool**](https://github.com/espressif/esptool)

You can skip this step if you already install the developing environment

**Step 1: Open mingw32.exe (if developing env is installed) or cmd (if install only esptool)**

* Locate to the project folder (/esp32), you should see the file CARD-SCANNER.bin
* Plug in your esp32, determine the port name (COM5, COM14, ...)
* Download the binary file to the esp32:

python /<esptool directory>/esptool.py --chip esp32 --port COM14 --baud 921600 --before default\_reset --after hard\_reset write\_flash -z --flash\_mode dio --flash\_freq 40m --flash\_size detect 0x10000 /<project\_directory>/CARD-SCANNER.bin

Change the 3 red words to your appropriate situation. Successfully uploaded program will look something like this:

