Introduction

In order to test the drones in the simulation environment, Gazeboo, Ardupilot SITL and Dronekit must be installed first. I did the installation by following the instructions from the link below.
Installation
Respectively; I downloaded the Ardupilot files, installed MAVProxy, Gazebo and DroneKit..

 After performing the installations, I created 2 scripts to start Ardupilot SITL and Gazeboo from the terminal. The point here is to do repetitive tasks with a single line of function call. Thus, many long commands can be reduced to a single executable command.

```
start_ardupilot.sh
cd ~/ardupilot/ArduCopter
../Tools/autotest/sim_vehicle.py -f gazebo-iris --console --map
```

```
start_gazeboo.sh
gazebo --verbose worlds/iris_arducopter_runway.world
```

In this way, a long command was shortened every time we wanted to run the simulation again.

 Now we open the terminal and type our commands. When we run Ardupilot SITL, the panels with information about the vehicle and the map are opened. When we run Gazeboo, our simulation environment comes up. If you wish, when you run Ardupilot SITL, you can close the incoming map and continue. Or you can track the location of the vehicle from there. Console as well as basic commands and mission creation. You can also do it via VSCode. Your vehicle must be in "GUIDED" mode to receive commands.
Details on attributes, commands and mission creation are in the links below.

Attribute

Control

Missions

Connection, arm and takeoff related codes are in **takeoff_goto.py**. An example of creating a mission is in **missions.py**. I will create another pdf file for explanations on related commands.