Instructions of Running

- **Install the following libraries**
  1. **json**
  2. **matplotlib**
  3. **numpy**
  4. **scipy**
  5. **multiprocessing**
  6. **threadpool**

- **Run the server**

  The server script needs **2 command line parameters**, the first one is the port number for listening, the other parameter is the number of process for serving the clients.

  Example running method:

  >> python3 server.py 55703 4

- **Run the client**

  The client script needs **6 command line parameters**, the meaning of each parameter:

  1. Target server IP address
  2. Port number on which the server listens for connections
  3. Index of the client robot
  4. Initial x coordinate of the client robot
  5. Initial y coordinate of the client robot
  6. Initial heading angle of the client robot

  Example running method:

  >> python3 client.py localhost 55703 1 10 10 0

- **Run the client multiple times**

  Create multiple robot clients on the server, each client robot should have **a unique Index of the client robot parameter (parameter 3).** Otherwise, the client would not be served **unless the previous client with the same Index of the client robot has completed the task**, which is simply **tracking the target path until the end**.

  Example running method:

  >> python3 client.py localhost 55703 2 60 10 0
  >> python3 client.py localhost 55703 3 60 60 0
  >> python3 client.py localhost 55703 4 10 10 0
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