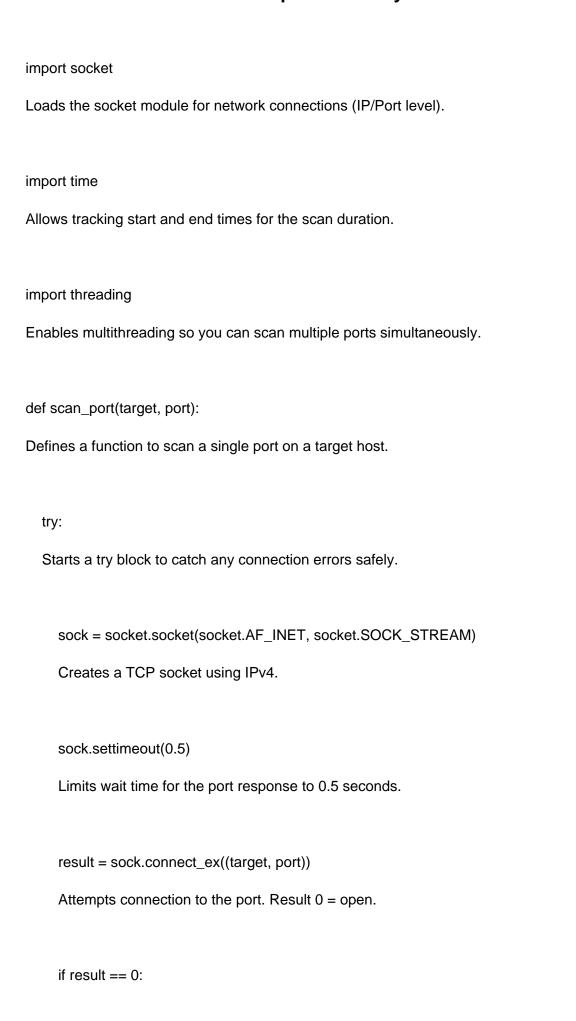
Loop PY - Line by Line Breakdown



```
If the port is open, print that its open.
       print(f"Port {port} is OPEN ")
     sock.close()
     Closes the socket to clean up the connection.
  except:
  Prevents crashes by catching errors silently.
     pass
target = input("Enter an IP address or hostname to scan: ").strip()
Takes target IP input and removes any leading/trailing spaces.
if not target:
Checks if the user submitted an empty string.
  print(" No IP or hostname entered. Exiting...")
  Message if the target input is empty.
  exit()
  Stops the script if no valid target is given.
start_port = int(input("Enter the starting port number: "))
Asks for the starting port number and converts it to an integer.
```

```
end_port = int(input("Enter the ending port number: "))
Asks for the ending port number.
start_time = time.time()
Captures the current time before the scan starts.
for port in range(start_port, end_port + 1):
Loops over each port in the specified range.
  thread = threading.Thread(target=scan_port, args=(target, port))
  Creates a new thread for scanning a port.
  thread.start()
  Starts the thread to perform the scan on that port.
end_time = time.time()
Captures the time after all scan threads have started.
duration = end_time - start_time
Calculates the total scan time.
print(f"\nScan completed in {duration:.2f} seconds.")
Prints how long the scan took.
```