

## Algorithm: Retrieve Local IP Address

### Algorithm

- 1: **Create** a socket object `s` using `socket.socket(socket.AF_INET, socket.SOCK_DGRAM)`
- 2: **Connect** to a public server using `s.connect(("8.8.8.8", 80))`
- 3: **Retrieve** the local IP address with `s.getsockname()[0]`
- 4: **Handle** potential `socket.error` exceptions using a `try-except` block
  - **Set** `user_ip` to `None` if an error occurs
- 5: **Return** the retrieved `user_ip` address