

# Basic Port Scanning

## Mission: Socket based port-scanner

The mission is to write a socket client we a target of TCP port scanning - determine whenever a port is open or close.

**Pre-requisites**:

* For an educational purpose we will use our Kali as the target.
* The **server** IP should be 127.0.0.1
* Go through sockets documentation and notebook available in the Technion module.
* Run the next services: ssh (22), apache2 (80), mysql (3306)

**Tasks**:

1. Create a basic communication client
2. Program a basic function to return a **True** when port is open
3. Create a script that will go through the **well-known ports** and determine which of them are open
4. Upgrade your tool and append another ability called **banner grabbing** - when a port is open you should try to connect to it and retrieve the banner message if possible. Limit the connection for 10 seconds - some of the services should retrieve you these data that easy.