# Connections with pwntools

Pwntools, in case you don't know is a CTF framework and exploit development library for Python 3.

It is designed for rapid prototyping and development and it will make our jobs with connections much simpler.

## Making Connections

In most of the pwning challenges in CTF the binary is hosted remotely, so we connect to it using netcat, sockets or `pwntools`. For that, pwntools has the `pwntools.tubes` module, that will help us connect to a server.

For example, if you want to connect to a remote ftp server, using the `pwnlib.tubes.remote`

```
1 from pwn import *
2
3 conn = remote('ftp.ubuntu.com',21)
4 conn.recvline()
5 #'220 FTP server (vsftpd)'
6 conn.send('USER anonymous\r\n')
7 conn.recvuntil(' ', drop=True)
8 #'331'
9 conn.recvline()
10 #'Please specify the password.\r\n'
11 conn.close()
```

In this case, at the first line we create the socket using `remote`, at the ip address of the domain `ftp.ubuntu.com` and port `21`. The first command receives a line that was sent by the server. It returns the line as a string format. In the code above the return is written as comments. Then, it send some information with `send`, without the need to specify amount of bytes to be sent. Another method that's pretty useful is the `recvuntil`, that will receive data until the string specified is found