Socket programming using python

it is a way of connecting 2 nodes o. a network to communicate with each other one socket (node) listens to a particular port at an IP while the other one reaches out to form a connection

first we have to import a socket libra.

server.py

```
import socket

s= socket.socket()
Print("socket created")
s.bind(("localhost", 9999))
s.listen(3)
Print("waiting for connection")

while true:
        c, addr = s.accept()
        print("connected with", addr)
        c.send('welcome')
        c.send(bytes('welcome', 'utf-8'))
        c.close()
```

client.py.

```
import socket
c= socket.socket()
c.connect(('localhost', 9999))
print(c.recv(1024))
```

1024 is the buffer size.
fast. run scans. py then run client

you can encode to print it as string format

- Python is one of the best scripting languages. vast variety of libraries allows us to write scripts for development cycle
- provides structured and readable automat code
- accessibility & flexibility

Multi-threading in python

A thread is an entity in a process that can be scheduled for execution also is the smallest unit of processing.

Multiple threads can exist within one process where each thread has
- its own register set & local variable
- All thread of a process share global variable and program code.

Multithreading is the ability to process multiple thread concurrently