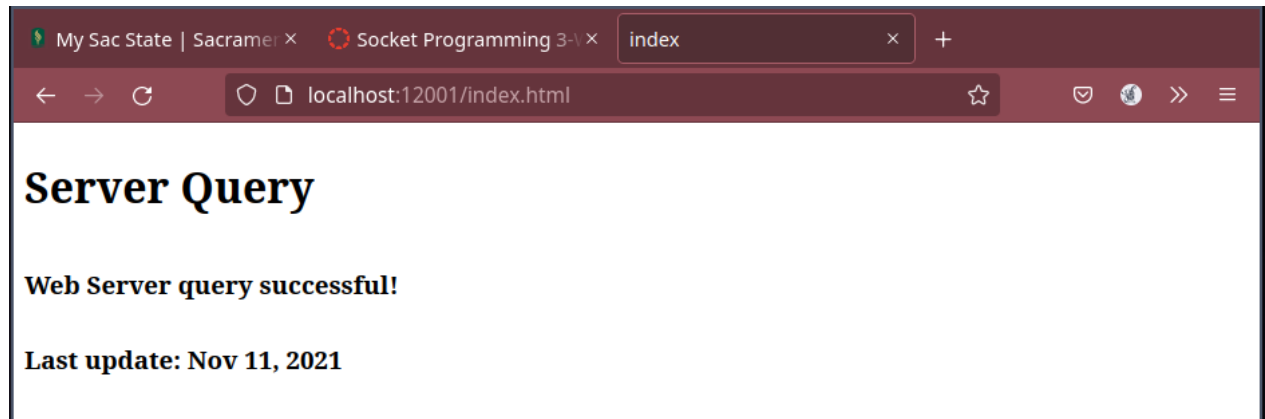


Socket Programming 3 - Web Server

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```
from socket import *
import sys
serverSocket = socket(AF_INET, SOCK_STREAM)
serverSocket.setsockopt(SOL_SOCKET, SO_REUSEADDR, 1)
# Prepare a server socket

serverPort = 12001
serverSocket.bind(("", serverPort))
serverSocket.listen(1)
print('The server is ready to receive.')

while True:
    # Establish the connection
    print('Ready to serve...')
    connectionSocket, addr = serverSocket.accept()

    try:
        message = connectionSocket.recv(1024)
        filename = message.split()[1].decode("utf-8")
        f = open(filename[1:])
        outputdata = f.read()
        f.close()
```

```
# Send one HTTP header line into socket
connectionSocket.send("HTTP/1.1 200 OK\r\n\r\n".encode())

# Send the content of the requested file to the client
for i in range(0, len(outputdata)):
    connectionSocket.send(outputdata[i].encode())
connectionSocket.send("\r\n".encode())
connectionSocket.close()
except IOError as x:
    print(x)
    # Send response message for file not found
    connectionSocket.send("HTTP/1.1 404 Not Found\r\n\r\n".encode())
    connectionSocket.send("<html><head></head><body><h1>404 Not Found</")
    # Close client socket
    connectionSocket.close()

serverSocket.close()
sys.exit()
```