Practical 10

Aim: Write a program to implement SSL.

CODE:

```
import socket
import ssl
hostname="www.python.org"
port=443
context=ssl.create_default_context()
#secure con
with socket.create_connection((hostname,port)) as sock:
   with context.wrap_socket(sock,server_hostname=hostname) as ssock:
      print(f"SSL protocol version:{ssock.version()}")

      #req
      req=f"GET / HTTP/1.1\r\nHost:{hostname}\r\n\r\n"
      ssock.send(req.encode())

      #res
      res=ssock.recv(4096).decode()

      print("response from the server:")
      print(res)
      ssock.close()
```

OUTPUT:

```
>>>
================================================ RESTART: C:/Users/admin/Documents/pr10INS.py ====
SSL protocol version:TLSv1.3
response from the server:
HTTP/1.1 200 OK
Connection: keep-alive
Content-Length: 50654
Content-Type: text/html; charset=utf-8
X-Frame-Options: SAMEORIGIN
Via: 1.1 varnish, 1.1 varnish
Accept-Ranges: bytes
Date: Fri, 13 Sep 2024 04:17:54 GMT
Age: 2357
X-Served-By: cache-iad-kiad7000025-IAD, cache-del21736-DEL
X-Cache: HIT, HIT
X-Cache-Hits: 52, 14
X-Timer: S1726201074.161525,VS0,VE0
Vary: Cookie
Strict-Transport-Security: max-age=63072000; includeSubDomains; preload
```