EX-2 IMPLEMENTATION OF STOP AND WAIT PROTOCOL

DATE: 16-03-2023

AIM :

To write a python program to perform stop and wait protocol,

ALGORITHM :

1. Start the program.
2. Get the frame size from the user
3. To create the frame based on the user request.
4. To send frames to server from the client side.
5. If your frames reach the server it will send ACK signal to client otherwise it will sendNACK signal to client.
6. Stop the program

PROGRAM :

CLIENT :

```
# Developed By : YUVARAJ.S
# Register Number : 22008589
import socket
s=socket.socket()
s.bind(('localhost',8000))
s.listen(5)
c,addr=s.accept()
while True:
    i=input("Enter a data: ")
    c.send(i.encode())
    ack=c.recv(1024).decode()
    if ack:
        print(ack)
        continue
    else:
        c.close()
        break
```

SERVER :

```python
# Developed By : YUVARAJ.S
# Register Number : 22008589
import socket
s=socket.socket()
s.connect(('localhost',8000))
while True:
    print(s.recv(1024).decode())
    s.send("Acknowledgement Recived".encode())
```

OUTPUT :

CLIENT :

```python
import socket
s=socket.socket()
s.bind(('localhost',8000))
s.listen(5)
c,addr=s.accept()
while True:
    i=input("Enter a data: ")
    c.send(i.encode())
    ack=c.recv(1024).decode()
    if ack:
        print(ack)
        continue
    else:
        c.close()
        break
```

```
Acknowledgement Recived
Acknowledgement Recived
Acknowledgement Recived
Acknowledgement Recived
```

SERVER :

```python
import socket
s=socket.socket()
s.connect(('localhost',8000))
```

```
    while True:
        print(s.recv(1024).decode())
        s.send("Acknowledgement Recived".encode())
```

```
10
apple
orange
watermwlon
```

RESULT :

Thus, python program to perform stop and wait protocol was successfully executed.