

## **Practical No : 0 (Basic of rpc)**

**Roll No : B -09**

**Date: 21/8/20**

### **Program 1: Implement concept of RPC (Basic)**

**Client :**

```
import socket
```

```
#client code
```

```
HOST = '127.0.0.10'
```

```
PORT = 65432
```

```
with socket.socket(socket.AF_INET, socket.SOCK_STREAM) as s:
```

```
    s.connect((HOST, PORT))
```

```
    print("CONNECTED")
```

```
    n=0
```

```
    while(n!=1):
```

```
        datai=str(input("***STOP=STOP** ENTER MESSAGE: "))
```

```
        if datai!="STOP":
```

```
            s.sendall(b'HI')
```

```
            data = s.recv(1024)
```

```
        if datai=="STOP":
```

```
            n=1
```

```
print('Received', repr(data))
```

**Server:**

```
import socket
```

```
HOST = '127.0.0.10'
```

```
PORT = 65432
```

```
with socket.socket(socket.AF_INET, socket.SOCK_STREAM) as s:
```

```
    s.bind((HOST, PORT))
```

```
    s.listen()
```

```
    conn, addr = s.accept()
```

```
    with conn:
```

```
        print('Connected by', addr)
```

```
        while True:
```

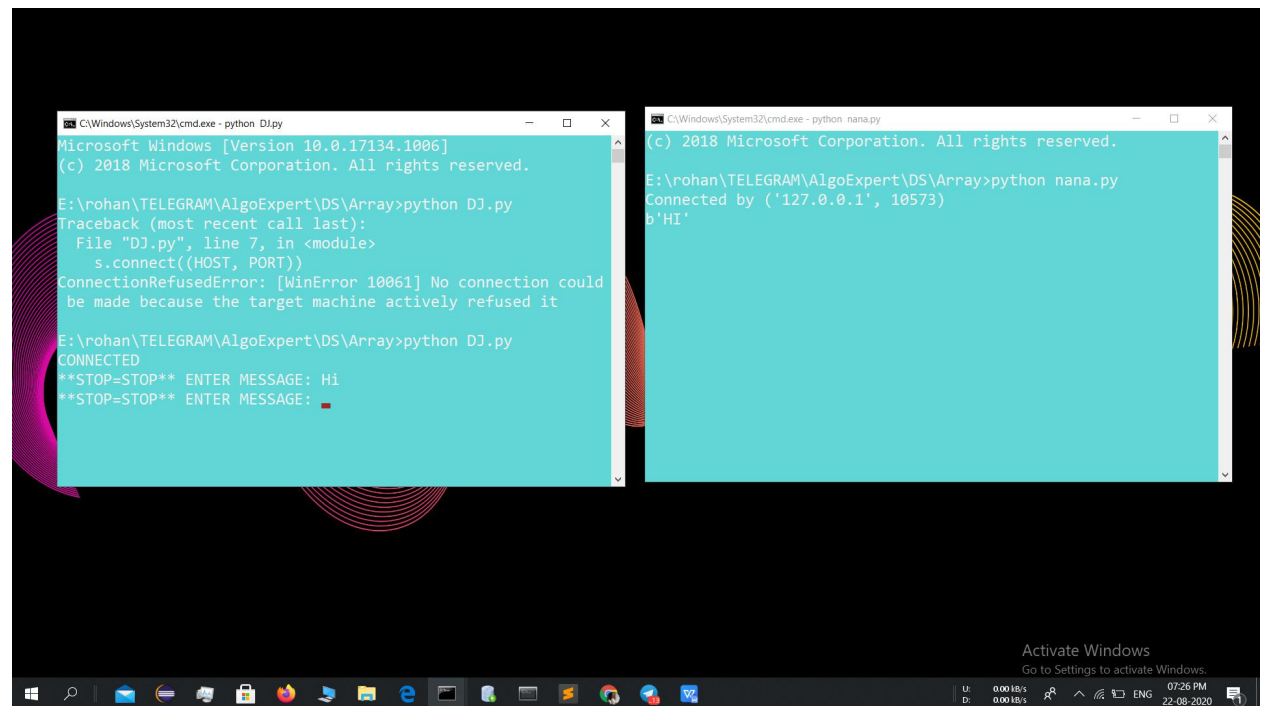
```
            data = conn.recv(1024);print(data)
```

```
            if not data:
```

```
                break
```

```
            conn.sendall(data)
```

## OUTPUT:



The screenshot displays two side-by-side Windows command prompt windows. The left window, titled 'C:\Windows\System32\cmd.exe - python DJ.py', shows the execution of 'python DJ.py'. It first displays a 'ConnectionRefusedError' with the message '[WinError 10061] No connection could be made because the target machine actively refused it'. After a second attempt, it shows 'CONNECTED' and prompts for a message, where 'Hi' has been entered. The right window, titled 'C:\Windows\System32\cmd.exe - python nana.py', shows the execution of 'python nana.py', which displays 'Connected by ('127.0.0.1', 10573)' and 'b'HI''. The Windows taskbar at the bottom shows the system clock as 07:26 PM on 22-08-2020.

```
C:\Windows\System32\cmd.exe - python DJ.py
Microsoft Windows [Version 10.0.17134.1006]
(c) 2018 Microsoft Corporation. All rights reserved.

E:\rohan\TELEGRAM\AlgoExpert\DS\Array>python DJ.py
Traceback (most recent call last):
  File "DJ.py", line 7, in <module>
    s.connect((HOST, PORT))
ConnectionRefusedError: [WinError 10061] No connection could
be made because the target machine actively refused it

E:\rohan\TELEGRAM\AlgoExpert\DS\Array>python DJ.py
CONNECTED
**STOP=STOP** ENTER MESSAGE: Hi
**STOP=STOP** ENTER MESSAGE: █

C:\Windows\System32\cmd.exe - python nana.py
(c) 2018 Microsoft Corporation. All rights reserved.

E:\rohan\TELEGRAM\AlgoExpert\DS\Array>python nana.py
Connected by ('127.0.0.1', 10573)
b'HI'
```

