

# COMPUTER NETWORKS

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SOCKET PROGRAMMING PROJECT

## FETCHING NAME BY ENTERING ROLL NUMBER

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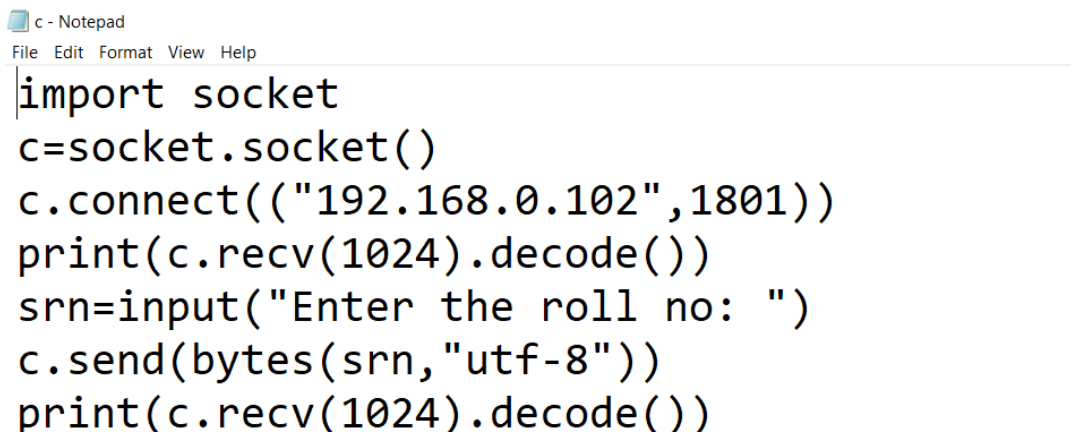
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# Abstract

In this project we are going to utilize socket programming to create a client and server system, where we are going to enter the roll no of the student in the client system and it sends the data to the server system. In server system we also create a CSV data base where the list of students with their roll numbers are stored. In server the roll no is checked in the database and the name of the student is returned to the client if the roll number is present and the name is displayed in the client system.


**FOLLOWING ARE THE SCREENSHOTS OF CLIENT CODE, SERVER CODE AND DATABASE RESPECTIVELY**

## 1)CLIENT CODE

A screenshot of a Notepad window titled 'c - Notepad'. The menu bar shows 'File', 'Edit', 'Format', 'View', and 'Help'. The text area contains the following Python code:

```
import socket
c=socket.socket()
c.connect(("192.168.0.102",1801))
print(c.recv(1024).decode())
srn=input("Enter the roll no: ")
c.send(bytes(srn,"utf-8"))
print(c.recv(1024).decode())
```

## 2) SERVER CODE

 s - Notepad

File Edit Format View Help

```
import socket
import pandas as pd

#import cs

test=pd.read_csv("data.csv")
#print(test)

s=socket.socket()
print("Socket is created")
s.bind(("192.168.0.102",1801))
s.listen(3)
print("Waiting for Connection")
while True:
    c,addr=s.accept()
    print("Connected with ",addr)
    c.send(bytes("Welcome to server","utf-8"))
    srn=c.recv(1024).decode()
    df = pd.DataFrame(test, columns = ['SRN', 'NAME'])
    for i in range(len(df)):
        if srn==str(df.loc[i, "SRN"]): name=df.loc[i, "NAME"]

    c.send(bytes(name,"utf-8"))

    c.close()
```

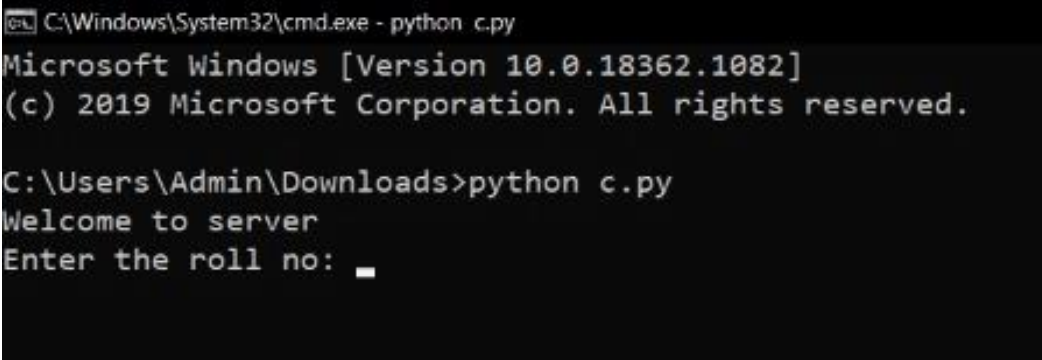
### 3) DATABASE (CSV)

	A	B	C	D
1	SRN	NAME		
2	1	Suraj KM		
3	2	Prashanth		
4	3	Taysir		
5	4	Snehal		
6	5	rakesh		
7	6	roshan		
8	7	sankalp		
9	8	kiran		
10	9	lehar		
11	10	thejas		
12	11	bharath		
13	12	aman		
14	13	anirudha		
15	14	akash deep		
16	15	momin		
17	16	nagaraj		
18	17	sulaiman		
19	18	rakshith		
20	19	aivan disoza		
21	20	manoj bhat		
22				
23				

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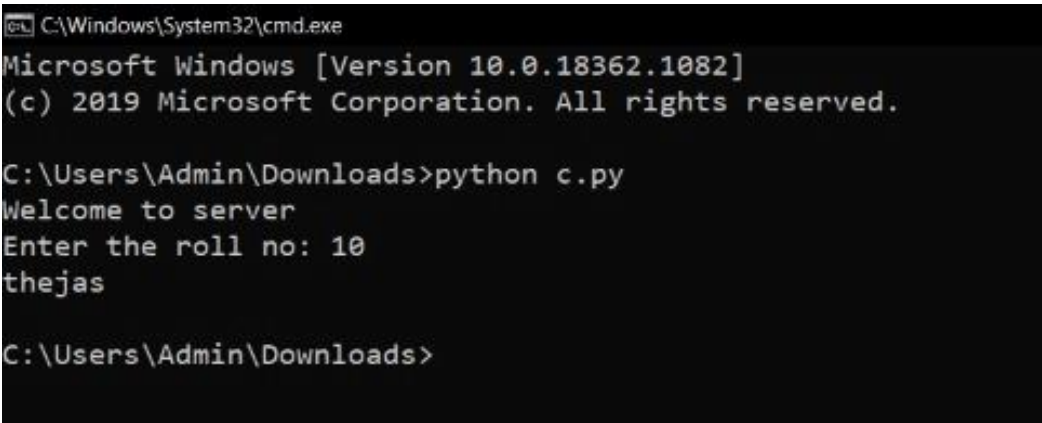
## SCREENSHOTS OF CLIENT AND SERVER SYSTEM COMMAND PROMPT

### 1)CLIENT SYSTEM



```
C:\Windows\System32\cmd.exe - python c.py
Microsoft Windows [Version 10.0.18362.1082]
(c) 2019 Microsoft Corporation. All rights reserved.

C:\Users\Admin\Downloads>python c.py
Welcome to server
Enter the roll no: _
```



```
C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.18362.1082]
(c) 2019 Microsoft Corporation. All rights reserved.

C:\Users\Admin\Downloads>python c.py
Welcome to server
Enter the roll no: 10
thejas

C:\Users\Admin\Downloads>
```

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## 2) SERVER SYSTEM

```
C:\Windows\System32\cmd.exe - python s.py
Microsoft Windows [Version 10.0.19044.1586]
(c) Microsoft Corporation. All rights reserved.

C:\Users\kmaha\Desktop\sp>python s.py
Socket is created
Waiting for Connection
```

```
C:\Windows\System32\cmd.exe - python s.py
Microsoft Windows [Version 10.0.19044.1586]
(c) Microsoft Corporation. All rights reserved.

C:\Users\kmaha\Desktop\sp>python s.py
Socket is created
Waiting for Connection
Connected with ('192.168.93.229', 63175)
```