Chapter 6: Networking and Database Connectivity

**1. Write a program to demonstrate knowing IP address of host**

from socket import \*

h='www.google.co.in'

try:

a=gethostbyname(h)

print('IP Address=',a)

except socket.gaierror:

print('Exception occurs...')

**2. Write a program to read the source code of web page**

import urllib.request

file=urllib.request.urlopen('https://www.python.org')

print(file.read())

**3.** **Write a program to download a web page from internet**

import urllib.request

file=urllib.request.urlopen('https://www.python.org')

c=file.read()

f=open('sss.html','wb')

f.write(c)

f.close()

**4. Write a program to download image from internet.**

import urllib.request

k='https://static01.nyt.com/images/2019/10/06/arts/06jokers-ranked-ledger/06jokers-ranked-ledger-videoSixteenByNineJumbo1600.jpg'

urllib.request.urlretrieve(k,'myimage.jpg')

**5. Write a program to demonstrate chat application (communication) from client and server.**

#chatserver.py

import socket

host='127.0.0.1'

port=9000

s=socket.socket()

s.bind((host,port))

s.listen(1)

c,addr=s.accept()

print('Client Connected...')

while True:

data1=c.recv(1024)

if not data1:

break

print('From Client:',str(data1.decode()))

data2=input('Enter response:')

c.send(data2.encode())

c.close()

#chatclient.py

import socket

host='127.0.0.1'

port=9000

s=socket.socket()

s.bind((host,port))

s.listen(1)

c,addr=s.accept()

print('Client Connected...')

while True:

data1=c.recv(1024)

if not data1:

break

print('From Client:',str(data1.decode()))

data2=input('Enter response:')

c.send(data2.encode())

c.close()

**6. Explain database connectivity in python.**

The Python standard for database interfaces is the Python DB-API. Most Python database interfaces adhere to this standard.

We can choose the right database for your application. Python Database API supports a wide range of database servers such as −

GadFly

mSQL

MySQL

PostgreSQL

Microsoft SQL Server 2000

Informix

Interbase

Oracle

Sybase

There are the following steps to connect a python application to our database.

1. Import mysql.connector module
2. Create the connection object.
3. Create the cursor object
4. Execute the query

**7. Write a program do demonstrate different operation on database using python**

import MySQLdb

c=MySQLdb.connect('localhost','root','root','vidya')

s=c.cursor()

s.execute('drop table if exists employee')

s1='create table employee(eno int, ename varchar(20),address varchar(30))'

s.execute(s1)

print('Table Created...')

s2="insert into employee values(1,'SSS','Dadar')"

s3="insert into employee values(2,'ABC','Thane')"

s4="insert into employee values(3,'XYZ','Vashi')"

s.execute(s2)

s.execute(s3)

s.execute(s4)

print('Records Inserted')

s5="delete from employee where eno=2"

s.execute(s5)

print('Record Deleted')

s6="update employee set ename='SWAPNIL' where address='Dadar'"

s.execute(s6)

print('Record Updated')

s.execute('select \* from employee')

rows=s.fetchall()

print('Total number of rows=',s.rowcount)

for a in rows:

print(a)

c.commit()

s.close()

c.close()