Exp No: 3   **PROGRAM FOR PING**

Date:

AIM

ALGORITHM

CODE

```java
import java.io.*;
import java.net.*;
import java.lang.*;
import java.util.Arrays;

public class Main {

    public static void sendPingReq(String ipAdrr, int timeout) throws
UnknownHostException, IOException {

        InetAddress ip = InetAddress.getByName(ipAdrr);

        System.out.println("Sending ping request to " + ipAdrr);
        if (ip.isReachable(timeout)) {
            System.out.println("Host is reachable");
            System.out.println("\nDetails: ");
            System.out.println("Address (+ 256. since it is unsigned bytes): " +
Arrays.toString(ip.getAddress()));
            System.out.println("Host Address: " + ip.getHostAddress());
            System.out.println("isAnyLocalAddress: " +ip.isAnyLocalAddress());
            System.out.println("HashCode of the ip addr (can be negative): " + ip.hashCode());
        } else {
            System.out.println("Can't reach the host!");
        }

    }

    public static void main(String[] args) throws IllegalArgumentException,
NumberFormatException {

        String ipAddress;
        int timeout;

        if (args.length != 2) {
            throw new IllegalArgumentException("Two arguments are required. IP Address and
Timeout");
        }

        ipAddress = args[0];
        try {
            timeout = Integer.parseInt(args[1]);
        } catch(NumberFormatException e) {
            throw new NumberFormatException("Timeout should be a number");
        }

        try {
            sendPingReq(ipAddress, timeout);
        } catch(UnknownHostException e) {
            System.out.println("IP address of the host could not be determined");
```

```
      } catch(IOException e) {
        System.out.println("Something went wrong!");
      }

   }

};
```

OUTPUT

```
                                         Computer-Networks\3>java Main 1.1.1.1 5000
Sending ping request to 1.1.1.1
Host is reachable

Details:
Address (+ 256. since it is unsigned bytes): [1, 1, 1, 1]
Host Address: 1.1.1.1
isAnyLocalAddress: false
HashCode of the ip addr (can be negative): 16843009
```

RESULT