

OBJECT ORIENTED PROGRAMMING WITH JAVA 8– LAB 14

Q1. Write a program to display the dates 10 days before and after today.

```
import java.time.*;

class FindDates
{
    public static void main(String [] args)
    {
        LocalDate ld1 = LocalDate.now();
        System.out.println("Todays Date : " + ld1);

        LocalDate ld2 = ld1.minusDays(10);
        System.out.println("Date before today :" +ld2);

        LocalDate ld3 = ld1.plusDays(10);
        System.out.println("Date after today :" + ld3);
    }
}
```

```
E:\java_notes>javac FindDates.java
```

```
E:\java_notes>java FindDates
Todays Date : 2023-10-28
Date before today :2023-10-18
Date after today :2023-11-07
```

Q2. Write a program to calculate your age in terms of years.

```
import java.time.*;

class CalculateAge
{
    public static void main(String [] args)
    {
        LocalDate ld1 = LocalDate.now();
        LocalDate ld2 = LocalDate.parse("1997-03-16");
        Period age = Period.between(ld2,ld1);
        int years = age.getYears();
        int months = age.getMonths();
        int days = age.getDays();

        System.out.println("Age is :"+ years + " Years " +months +" months " + days + " Days");
    }
}
```

```
E:\java_notes>javac CalculateAge.java
```

```
E:\java_notes>java CalculateAge
Age is :26 Years 7 months 12 Days
```

Q3. Write a program to find the numeric IP address of the following website www.bbc.com.

```
import java.net.*;

class FindIPAddress
{
    public static void main(String args[])
    {
        try
        {
            InetAddress [] ia1 = InetAddress.getAllByName("www.bbc.com");
            System.out.println("Get all by name :");

            for(int i = 0; i < ia1.length ; i ++)
            {
                System.out.println(ia1[i]);
            }
            System.out.println("Get local host ip : " + ia1[0].getHostAddress());
        }
        catch(UnknownHostException ex)
        {
            System.out.println(ex);
        }
    }
}
```

```
E:\java_notes>javac FindIPAddress.java
```

```
E:\java_notes>java FindIPAddress
Get all by name :
www.bbc.com/151.101.152.81
Get local host ip : 151.101.152.81
```

Q4. Write a program to create a simple Server in your machine. The server will send a message "Hello Everyone" whenever a client connects to it.

```

import java.net.*;
import java.io.*;

class ServerConn
{
    public static void main(String args[]) throws IOException
    {
        ServerSocket ss = new ServerSocket(2000);
        System.out.println("Server is Ready ");

        boolean f = false;
        while(f != true)
        {
            Socket cs = ss.accept();
            InputStream in = cs.getInputStream();
            InputStreamReader ins = new InputStreamReader(in);
            BufferedReader br = new BufferedReader(ins);

            String s = " ";
            do
            {
                s=br.readLine();
                System.out.println(s);
            }
            while((s.equals(".")));
            cs.close();
            f = true;
        }
        ss.close();
    }
}

```

```

import java.net.*;
import java.io.*;

class ClientSend
{
    public static void main(String args[]) throws IOException
    {
        Socket cs = new Socket("localhost",2000);
        OutputStream os = cs.getOutputStream();
        PrintWriter p = new PrintWriter(os);

        InputStreamReader ins = new InputStreamReader(System.in);
        BufferedReader br = new BufferedReader(ins);
        String s = " ";

        System.out.println("Sending ");
        do
        {
            s=br.readLine();
            p.println(s);
            p.flush();
        }
        while((s.equals(".")));

        cs.close();
    }
}

```

E:\java_notes>javac ServerConn.java

E:\java_notes>java ServerConn
Server is Ready
Hello Everyone.

E:\java_notes>javac ClientSend.java

E:\java_notes>java ClientSend
Sending
Hello Everyone.