

Q.6>> Write a programme using multithreading where 2 threads are run. The 1st thread Fibonacci will display the series for n terms with 1000ms delay & 2nd thread name prime will display prime numbers from 1 to n terms with 500ms delay.

```
/*multithreading*/  
import java.util.*;  
import java.lang.Thread;  
public class Multithreading  
{  
    public static void main(String args[])  
    {  
        new Fibonacci().start();  
        new Prime().start();  
    }  
}  
class Fibonacci extends Thread  
{  
    public void run()  
    {  
        int n=16;  
        int i,a=0,b=1,c;  
        System.out.println("the fibonacci series is:");  
        System.out.println(a);  
        System.out.println(b);  
        for(i=2;i<=n;i++)  
        {  
            c=a+b;  
            System.out.println(c);  
            a=b;
```

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        b=c;
        try
        {
            sleep(1000);
        }
        catch(Exception e)
        {
        }
    }
    System.out.println("exit from fibo");
}
}

class Prime extends Thread
{
    public void run()
    {
        int n=16;
        int i,j,ct;
        for(i=1;i<=n;i++)
        {
            ct=0;
            for(j=2;j<=(i/2);j++)
            {
                if(i%j==0)
                {
                    ct++;
                    break;
                }
            }
            if(ct==0)
            {

```

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        System.out.println("prime no :"+i);
    }

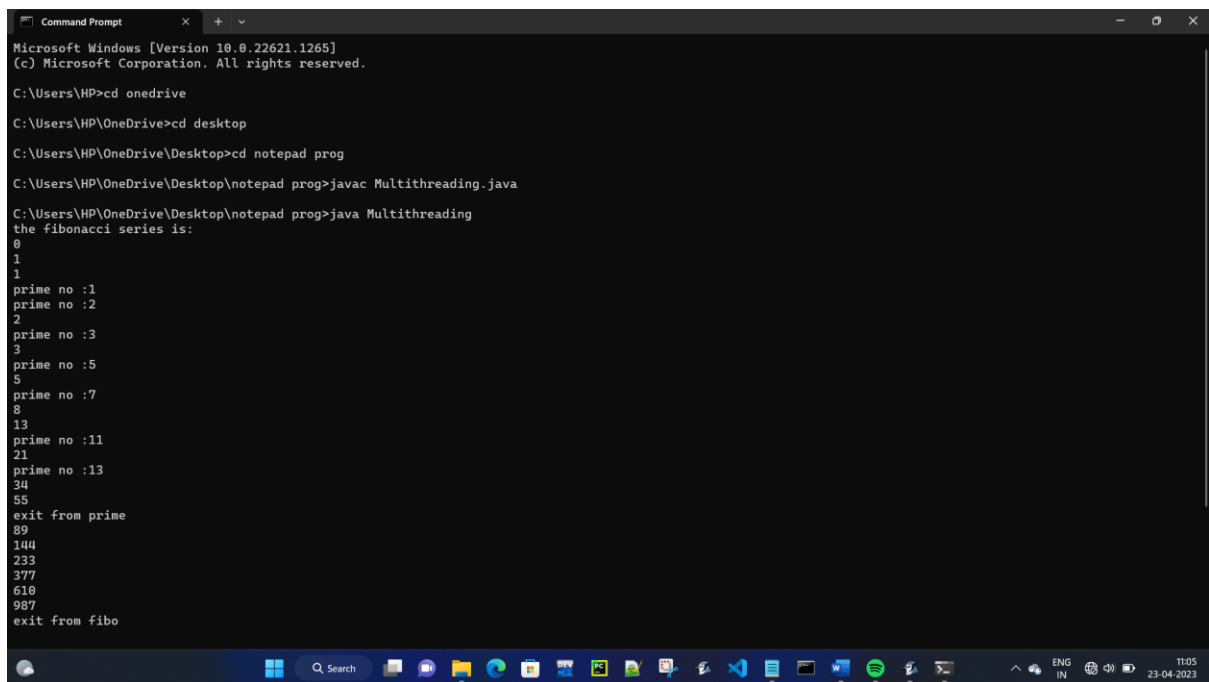
    try
    {
        sleep(500);
    }

    catch(Exception e)
    {
    }

}

System.out.println("exit from prime");
}
}

```



```

Microsoft Windows [Version 10.0.22621.1265]
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C:\Users\HP>cd onedrive
C:\Users\HP\OneDrive>cd desktop
C:\Users\HP\OneDrive\Desktop>cd notepad prog
C:\Users\HP\OneDrive\Desktop\notepad prog>javac Multithreading.java
C:\Users\HP\OneDrive\Desktop\notepad prog>java Multithreading
the fibonacci series is:
0
1
1
prime no :1
prime no :2
2
prime no :3
3
prime no :5
5
prime no :7
8
13
prime no :11
21
prime no :13
34
55
exit from prime
89
144
233
377
610
987
exit from fibo

```