<u>Problem</u>: Anshul was provided with a task to optimize the system by implementing multithreading. Consider three threads Thread1, Thread2 and Thread3, Thread2 should run followed by Thread1 set the priorities accordingly. Thread 3 should execute only after Thread2 execution is completed. Also display the meta data of threads such as id and name.

Program:

```
package Hare_Krishna;
import java.util.Scanner;
public class Prac_19
{
   public static void main(String... s)
       Scanner scanner = new Scanner(System.in);
       String name1, name2, name3;
       System.out.print("\nEnter First Name: ");
       name1 = scanner.next();
       System.out.print("Enter Second Name: ");
       name2 = scanner.next();
       System.out.print("Enter Third Name: ");
       name3 = scanner.next();
```

```
int id1, id2, id3;
       id1 = 101;
       id2 = 102;
       id3 = 103;
       Thread t1 = new Thread(name1);
       Thread t2 = new Thread(name2);
       Thread t3 = new Thread(name3);
       t1.start();
       t2.start();
       t3.start();
       try
       {
            Thread.sleep(600);
       catch (Exception e)
       {
            System.out.println(e);
       System.out.println("ID \longrightarrow " + id1 + " \nName \longrightarrow " +
t1.getName());
       System.out.println();
```

```
try
             Thread.sleep(600);
        catch (Exception e)
             System.out.println(e);
        System.out.println("ID \longrightarrow " + id2 + " \nName \longrightarrow " +
t2.getName());
        System.out.println();
        try
             Thread.sleep(600);
        catch (Exception e)
        {
             System.out.println(e);
        System.out.println("ID \longrightarrow " + id3 + " \nName \longrightarrow " +
t3.getName());
```

```
}
}
```

Output:

```
■ ● ■ ⑤ Hare_Krishna [-/Documents/sem3practicals/OOP/Hare_Krishna] - .../src/Hare_Krishna/Prac... 1 1.7 kb/s 1 1.6 kb/s
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<u>File Edit View Navigate Code Refactor Build Run Tools Git W</u>indow <u>H</u>elp
                                                                                                                                        Hare_Krishna > src > Hare_Krishna > @ Prac_19 > @ mair
                                  ■ Project マ
                                                                                                                            /usr/lib/jvm/default/bin/java
                                                         import java.util.Scanner:
                                                                                                                            -javaagent:/usr/share/idea/lib/idea rt
                                                                                                                           .jar=36809:/usr/share/idea/bin -Dfile.encoding=UTF-8
         @ ex3
                                                         public class Prac_19
                                                                                                                           -classpath /home/yash/Documents/sem3practicals/00P
         harekrsna
                                                                                                                        + /Hare_Krishna/bin/production/Hare_Krishna:/home/yash/
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                                                                 String name1, name2, name3;
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                                                                 System.out.print("\nEnter First Name: "):
         😅 prac 4
                                                                                                                            .m2/repository/org/jetbrains/kotlin/kotlin-stdlib-common/1
                                                                                                                            .7.10/kotlin-stdlib-common-1.7.10.jar:/home/yash/
                                                                 name1 = scanner.next();
                                                                System.out.print("Enter Second Name: ");
                                                                                                                            .m2/repository/org/jetbrains/annotations/13
       > @ prac_7.java
                                                                                                                            .0/annotations-13.0.jar:/home/yash/
                                                                                                                            .m2/repository/org/jetbrains/kotlin/kotlin-stdlib-jdk7/1.7
                                                                                                                            .10/kotlin-stdlib-jdk7-1.7.10
         Prac_11
                                                                                                                             .jar:/home/yash/Documents/sem3practicals/00P/Hare_Krishna
                                                                 id1 = 101;
                                                                                                                            /mariadb-java-client-3.1.0.jar Hare_Krishna.Prac_19
       id2 = 102;
       > © Prac 14.java
                                                                                                                           Enter First Name: Haribol
                                                                 id3 = 103;
                                                                 Thread t1 = new Thread(name1);
                                                                                                                           Enter Second Name: Haribol2
         @ Prac_16
                                                                 Thread t2 = new Thread(name2);
                                                                                                                           Enter Third Name: Haribol3
         @ Prac 17
                                                                 Thread t3 = new Thread(name3);
         # README.md
       > © This.java
                                                                                                                           Name → Haribol2
         ₫ TowerofHanoi
                                                                     Thread.sleep( !: 600);
                                                                                                                           ID → 103
       > GYSL_ex_inhrt2.java
                                                                 catch (Exception e)
                                                                                                                            Process finished with exit code \boldsymbol{\theta}
    > 🏿 mariadb-java-client-3.1.0.jar
                                                                 System.out.println("ID \longrightarrow " + id1 + " \nName \longrightarrow " +
    Scratches and Consoles
    Git ≡ TODO • Services
                                                                                                                                                              16:1 LF UTF-8 4 spaces 12 main
```