Experiment no.11

Aim:- Implementation of Runnable Interface.
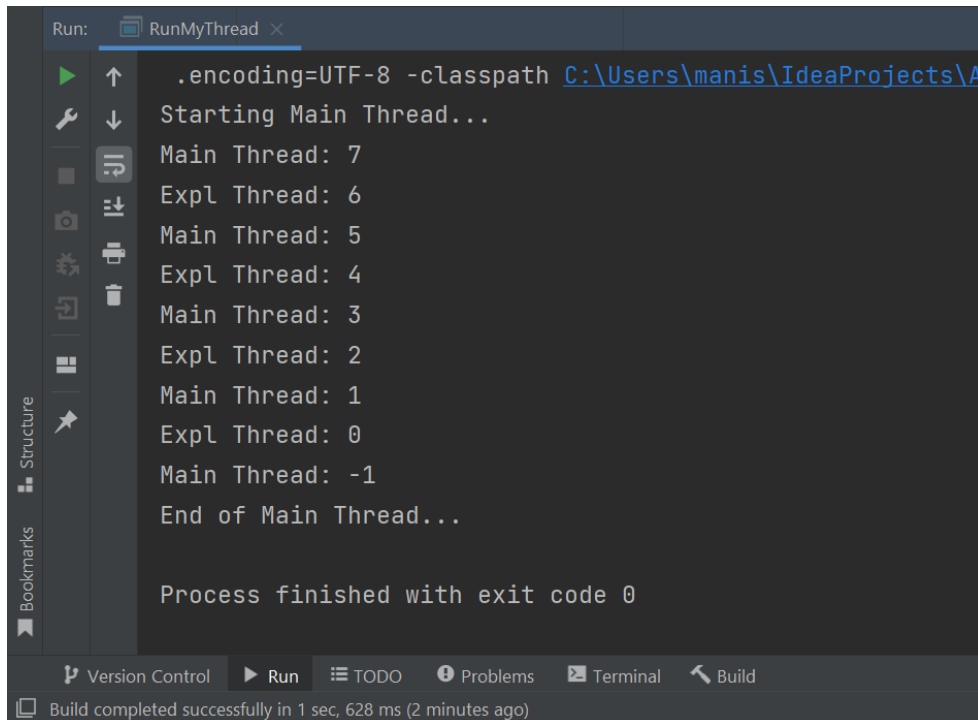
Program A):-

Input:-

```java
package com.AJPExperiments;

class MyRunnableThread implements Runnable {
    public static int myCount =8;
    public MyRunnableThread(){
    }
    public void run(){
        while(MyRunnableThread.myCount>=0){
            try{
                System.out.println("Expl Thread: "+(--MyRunnableThread.myCount));
                Thread.sleep(100);
            }catch (InterruptedException iex){
                System.out.println("Exception in thread: "+iex.getMessage());
            }
        }
    }
}
class RunMyThread{
    public static void main(String args[]){
        System.out.println("Starting Main Thread...");
        MyRunnableThread mrt = new MyRunnableThread();
        Thread t = new Thread(mrt);
        t.start();
        while(MyRunnableThread.myCount>=0){
            try{
                System.out.println("Main Thread: "+(--MyRunnableThread.myCount));
                Thread.sleep(100);
            }catch(InterruptedException iex){
                System.out.println("Exception in main thread: "+iex.getMessage());
            }
        }
        System.out.println("End of Main Thread...");
    }
}
```

Output:-

```
Run:        RunMyThread  ×
     ▶  ↑        .encoding=UTF-8 -classpath C:\Users\manis\IdeaProjects\A
     ✦  ↓    Starting Main Thread...
     ■  ⇥    Main Thread: 7
     ⇥↓    Expl Thread: 6
     ◉       Main Thread: 5
     ⎙       Expl Thread: 4
     🗑       Main Thread: 3
             Expl Thread: 2
             Main Thread: 1
             Expl Thread: 0
             Main Thread: -1
             End of Main Thread...

             Process finished with exit code 0
```

⌲ Version Control ▶ Run ☰ TODO ❶ Problems ⅀ Terminal ⚒ Build
▢ Build completed successfully in 1 sec, 628 ms (2 minutes ago)
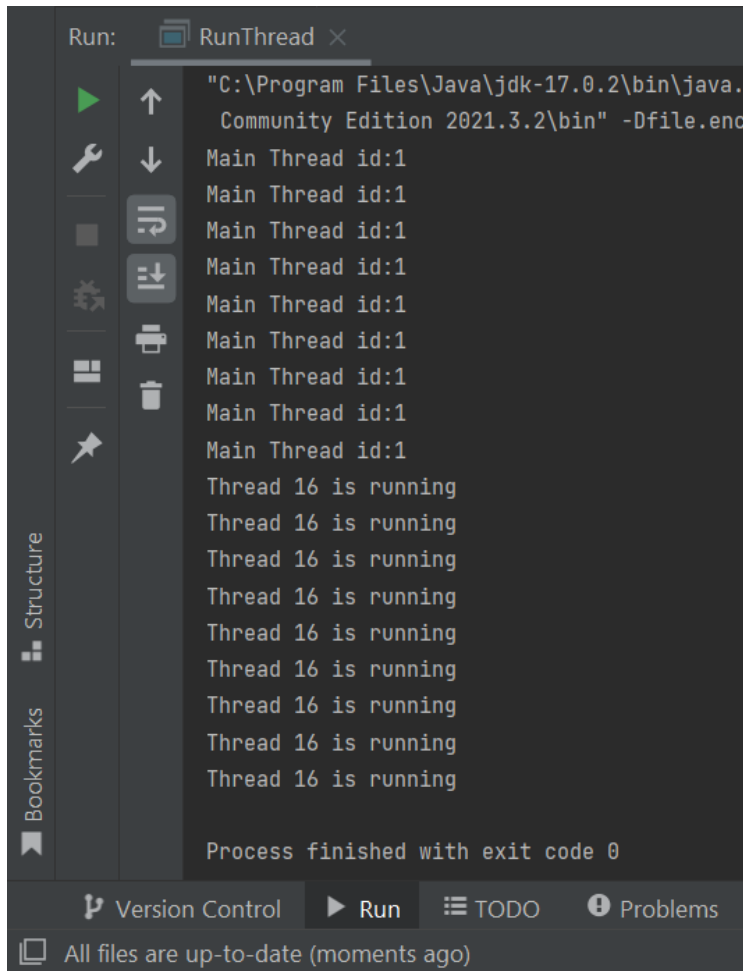
Program B):-

Input:-

package com.AJPExperiments;

```java
class MultiThread implements Runnable{
    public void run(){
        for(int i=0;i<9;i++){
            System.out.println("Thread " + Thread.currentThread().getId()+" is running");
        }
    }
}
class RunThread{
    public static void main(String args[]){
        Thread object = new Thread(new MultiThread());
        object.start();
        for(int i = 0; i<9;i++){
            System.out.println("Main Thread id:"+Thread.currentThread().getId());
        }
    }
}
```

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Output:-

```
Run:        RunThread ×
  ▶    ↑      "C:\Program Files\Java\jdk-17.0.2\bin\java.
             Community Edition 2021.3.2\bin" -Dfile.enc
  🔧   ↓     Main Thread id:1
             Main Thread id:1
       ⇄     Main Thread id:1
  ■          Main Thread id:1
       ⬇     Main Thread id:1
  🐞          Main Thread id:1
       🖨     Main Thread id:1
  ▥          Main Thread id:1
       🗑     Main Thread id:1
  📌          Thread 16 is running
             Thread 16 is running
             Thread 16 is running
             Thread 16 is running
             Thread 16 is running
             Thread 16 is running
             Thread 16 is running
             Thread 16 is running
             Thread 16 is running

             Process finished with exit code 0

   ᵖ Version Control   ▶ Run   ☰ TODO   ❶ Problems
 ▢ All files are up-to-date (moments ago)
```

Practical Performance (4)	Writeup & Oral (4)	Attendance (2)	Total (10)