

- 1) Write a program to create multiple threads by implementing Runnable interface.
- 2) Use join(), isAlive(), getPriority(), SetPriority() methods.

**Code:**

```
class mythread1 implements Runnable {
    Thread t;
    String threadName;
    int mul;
    mythread1(String name, int c) {
        threadName=name;
        mul=c;
        t = new Thread(this,threadName);
        System.out.println("child " + t);
    }
    public void run() {
        try {
            Thread t1 = Thread.currentThread();
            t1.setPriority(3);
            System.out.println("Thread " + Thread.currentThread().getName() + " of Id "
                + Thread.currentThread().threadId() + " of priority " + t1.getPriority() +
                " is running");
            for (int i = 1; i <= 10; i++) {
                System.out.println(Thread.currentThread().getName() + mul + " X " + i + " = " +
                    (mul*i));
                Thread.sleep(100);
            }
        } catch (Exception e) {
            System.out.println("Exception is caught" + e);
        }
    }
}

public class thread2 {
    public static void main(String[] args) throws Exception {
        mythread1 object = new mythread1("multiple of 3 ", 3);
        object.t.start();
        mythread1 object2 = new mythread1("multiple of 5 ", 5);
        object2.t.start();
        System.out.println(object.t.isAlive());
        System.out.println(object2.t.isAlive());
        object.t.join();
        System.out.println("thread multiple of 3 is alive  " + object.t.isAlive());
        object2.t.join();
        System.out.println("thread multiple of 5 is alive  " + object2.t.isAlive());
        System.out.println("end of main");
    }
}
```

```
}
```

### **Output -**

```
child Thread[#20,multiple of 3 ,5,main]
child Thread[#21,multiple of 5 ,5,main]
true
true
Thread multiple of 5  of Id 21 of priority 3 is running
Thread multiple of 3  of Id 20 of priority 3 is running
multiple of 3 3 X 1 = 3
multiple of 5 5 X 1 = 5
multiple of 3 3 X 2 = 6
multiple of 5 5 X 2 = 10
multiple of 3 3 X 3 = 9
multiple of 5 5 X 3 = 15
multiple of 5 5 X 4 = 20
multiple of 3 3 X 4 = 12
multiple of 5 5 X 5 = 25
multiple of 3 3 X 5 = 15
multiple of 5 5 X 6 = 30
multiple of 3 3 X 6 = 18
multiple of 3 3 X 7 = 21
multiple of 5 5 X 7 = 35
multiple of 5 5 X 8 = 40
multiple of 3 3 X 8 = 24
multiple of 5 5 X 9 = 45
multiple of 3 3 X 9 = 27
multiple of 3 3 X 10 = 30
multiple of 5 5 X 10 = 50
thread multiple of 3 is alive    false
thread multiple of 5 is alive    false
end of main
```