

# Multithread JDBC

Full Subtitle

Aniket Raj Vaibhav Rai

20384104@pondiuni.ac.in 20384124@pondiuni.ac.in

Guided By Dr.Sukhvinder Singh Pondicherry University

April 26, 2023

# Table of Contents

- 1 Full Section 1 Multithreading
  - Full Subsection 1 Name

# Table of Contents

- 1 Full Section 1 Multithreading
  - Full Subsection 1 Name

# Multithreading

- Multithreading is a Java feature that allows concurrent execution of two or more parts of a program for maximum utilization of CPU.
- Each part of such program is called a thread. So, threads are light-weight processes within a process. **Threads can be created by using two mechanisms**
  - Extending the Thread class
  - Implementing the Runnable Interface

# java.lang.Thread class

## "1.Creating a thread by extending thread class"

```
1  class MyThread1 extends Thread{
2      @Override
3      public void run(){
4          int i =0;
5          while(i<40000){
6              System.out.println("Thread 1 for My Cooking Thread is Running");
7              System.out.println("I am happy!");
8              i++;
9          }
10     }
11 }
12
13 class MyThread2 extends Thread{
14     @Override
15     public void run(){
16         int i =0;
17         while(i<40000){
18             System.out.println("Thread 2 for Chatting with her");
19             System.out.println("I am sad!");
20             i++;
21         }
22     }
23 }
24
25 public class Main {
26     public static void main(String[] args) {
27         MyThread1 t1 = new MyThread1();
28         MyThread2 t2 = new MyThread2();
29         t1.start();
30         t2.start();
31     }
32 }
```

# Output

```
Thread 1 for My Cooking Thread is Running
I am happy!
Thread 1 for My Cooking Thread is Running
I am happy!
Thread 2 for Chatting with her
I am sad!
Thread 2 for Chatting with her
I am sad!
Thread 2 for Chatting with her
I am sad!
Thread 2 for Chatting with her
I am sad!
Thread 2 for Chatting with her
I am sad!
Thread 1 for My Cooking Thread is Running
I am happy!
Thread 1 for My Cooking Thread is Running
I am happy!
Thread 1 for My Cooking Thread is Running
I am happy!
Thread 1 for My Cooking Thread is Running
I am happy!
Thread 1 for My Cooking Thread is Running
I am happy!
Thread 1 for My Cooking Thread is Running
I am happy!
Thread 1 for My Cooking Thread is Running
I am happy!
Thread 1 for My Cooking Thread is Running
I am happy!
Thread 2 for Chatting with her
I am sad!
Thread 2 for Chatting with her
I am sad!
Thread 2 for Chatting with her
I am sad!
Thread 2 for Chatting with her
I am sad!
```

## 2. java.lang.Runnable interface

```
Main.java x
1 1 usage
2 class MultithreadingDemo implements Runnable {
3     public void run()
4     {
5         try {
6             System.out.println(
7                 "Thread " + Thread.currentThread().getId()
8                 + " is running");
9         }
10        catch (Exception e) {
11            System.out.println("Exception is caught");
12        }
13    }
14 }
15
16 class Multithread {
17     public static void main(String[] args)
18     {
19         int n = 8; // Number of threads
20         for (int i = 0; i < n; i++) {
21             Thread object
22                 = new Thread(new MultithreadingDemo());
23             object.start();
24         }
25     }
26 }
```

# Output

```
n: Multithread x
/home/system/.jdk/openjdk-19.0.2/bin/java -javaagent:/home/system/.local/share/JetBrains/Toolbox/apps/
Thread 23 is running
Thread 25 is running
Thread 22 is running
Thread 29 is running
Thread 27 is running
Thread 26 is running
Thread 28 is running
Thread 24 is running

Process finished with exit code 0
```



# Bibliography

- <https://www.tutorialspoint.com/index.htm>
- [www.gfg.com](http://www.gfg.com)

Thank You for Your Attention!