Sri Lanka Institute of Information Technology



Software Engineering Process and Quality Management (SE3010)

Practical 7 - WCC

2025

IT Number - IT22251114

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**a)**

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| **Program Statements** | **Tokens** |
| public class DeamonThread extends Thread { |  |
| public static void main(String[ ] args) { | void , main() |
| System.out.println("Entering main Method"); | System , . , out , . , println() , “Entering Main  Method” |
| DeamonThread t = new DeamonThread( ); | DeamonThread , t , = , new , DeamonThread() |
| int number =10; | Int , number , = , 10 |
| t.setDaemon(true); | t , . , setDaemon() |
| t.start(); | t , . , start() |
| try { | try |
| if(number == 10) | If() , number , = =, 10 |
| Thread.sleep(3000); | Thread , . , sleep() |
| }catch (InterruptedException x) {} | Catch() , InterruptedException |
| System.out.println("Leaving main method"); | System , . , out , . , prntln() , Leaving the main method |
| } |  |
| public void run() { | Void , run() |
| System.out.println("Entering run method"); | System , . out , . , println() , Entering run method |
| try { | try |
| System.out.println("CurrentThread() is" + Thread.currentThread().getName()); | System , . , out , . , println() , CurrentThread() is , + , Thread , . , currentThread() , . , getName() |
| while(true){ | While() |
| try{ | try |
| Thread.sleep(500); | Thread , . , sleep() |
| System.out.println("In run method: woke up again"); | System , . , out , . , println() , In run method: woke up again |
| } catch (InterruptedException x) { | Catch() , InterruptedException |
| x.printStackTrace(); | X , . , printStackTrace() |
| } |  |
| } |  |
| } |  |
| } |  |
| } |  |

**b)**

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| **Line No** | **Program Statements** | **S** | **Wn** | **Wi** | **Wc** | **Wt** | **WC** |
| 1 | public class DeamonThread extends Thread { |  |  |  |  |  |  |
| 2 | public static void main(String[ ] args) { | 2 | 0 | 1 | 0 | 1 | 2 |
| 3 | System.out.println("Entering main Method"); | 6 | 0 | 1 | 0 | 1 | 6 |
| 4 | DeamonThread t = new DeamonThread( ); | 5 | 0 | 1 | 0 | 1 | 5 |
| 5 | int number =10; | 4 | 0 | 1 | 0 | 1 | 4 |
| 6 | t.setDaemon(true); | 3 | 0 | 1 | 0 | 1 | 3 |
| 7 | t.start(); | 3 | 0 | 1 | 0 | 1 | 3 |
| 8 | try { | 1 | 0 | 1 | 0 | 1 | 1 |
| 9 | if(number == 10) | 4 | 0 | 1 | 1 | 2 | 8 |
| 10 | Thread.sleep(3000); | 3 | 1 | 1 | 0 | 2 | 6 |
| 11 | }catch (InterruptedException x) {} | 2 | 0 | 1 | 0 | 1 | 2 |
| 12 | System.out.println("Leaving main method"); | 6 | 0 | 1 | 0 | 1 | 6 |
| 13 | } |  |  |  |  |  |  |
| 14 | public void run() { | 2 | 0 | 1 | 0 | 1 | 1 |
| 15 | System.out.println("Entering run method"); | 6 | 0 | 1 | 0 | 1 | 6 |
| 16 | try { | 1 | 0 | 1 | 0 | 1 | 1 |
| 17 | System.out.println("CurrentThread() is" + Thread.currentThread().getName()); | 12 | 0 | 1 | 0 | 1 | 12 |
| 18 | while(true){ | 1 | 0 | 1 | 2 | 3 | 3 |
| 19 | try{ | 1 | 1 | 1 | 0 | 2 | 2 |
| 20 | Thread.sleep(500); | 3 | 1 | 1 | 0 | 2 | 6 |
| 21 | System.out.println("In run method: woke up again"); | 6 | 1 | 1 | 0 | 2 | 12 |
| 22 | } catch (InterruptedException x) { | 2 | 0 | 1 | 0 | 1 | 2 |
| 23 | x.printStackTrace(); | 3 | 0 | 1 | 0 | 1 | 3 |
| 24 | } |  |  |  |  |  |  |
| 25 | } |  |  |  |  |  |  |
| 26 | } |  |  |  |  |  |  |
| 27 | } |  |  |  |  |  |  |
| 28 | } |  |  |  |  |  |  |
| **WCC Value** | | | | | | | 94 |