#### **MIT-WPU**

# School of Computer Science

Practical Assignment No: 03

Std: MCA- I Subject: Core Java

Assignment Date: 14<sup>th</sup> Oct 2022 Submission Date: 31<sup>st</sup> October 2022

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## **Topic: Multithreading and File Handling**

#### Q.1.

What is multithreading? Write a multithreaded program for demonstrating following threads: .

- a) Display all number divisible by 8 from 1 to 100.
- b) Display all even numbers between 51 to 100.
- c) Display the message "Java is Awesome" 10 times.

### **Q.2.** Write an application that will create following threads:

- -- Which will print A to Z 50 times?
- -- And 15 terms of Fibonacci Series

#### Q.3.

Write a program to create two threads which will display message 'n' number of times. While creating thread pass the message and n as parameters.

Message should appear in alternate order.

#### Q.4.

Explain about Thread Life Cycle

#### Q.5.

Write a program which demonstrate Thread Synchronization by using Synchronized statement and Synchronized Methods.

(Write short note on Thread Synchronization and explain with example)

#### Q.6.

Write a Java Program which demonstrate Interthread communication by using wait(), notify() and notifyAll().

#### Q.7.

Write a multithreaded application bus / railway ticket reservation system.

#### Q.8.

Write a Java program that creates three threads. First thread displays "Hello!" every one second, the second thread displays "Wear Mask!" every two seconds and "Use Sanitizer!" every 5 seconds.

## **Q.9.**

Write the difference between Extending thread and implementing runnable?

### Q.10.

Write a threaded applet which will display circle with different colours. Colour will change after 1 second. Accept radius of the circle as Parameter

(i.e. Write a Multithreaded application which demonstrate Traffic Signal)

## Q.11.

Write a Multithreaded application which demonstrate Bouncing Ball Applet

## Q.12.

Write a Java program to accept a file name from command prompt. If the file exists, then display number of words and lines in that file using FileReader class.

# **File Handling**

- **Q.1.** Write a java program to display the contents of the file in reverse order.
- Q.2. Write a Java Program to append the content of File f1(abc.txt) to File f2(xyz.txt)
- **Q.3.** Write a Java Program to take charters input from user once user enters 'q' quit from the file and display the content added in the file.

#### Q.4.

Write a Java program to take a file path in a TextField and display the content present in the file in TextArea.

#### Q.5.

Write a program to count characters, word and lines in a file . Read the file name from User