MIT-WPU

School of Computer Engineering and Technology

Department of Computer Science and Application

Practical Assignment No: 03

Std: F.Y. MCA- I **Subject: Java Programming**

Assignment Date: 2nd Dec 2024 Submission Date: 5th Dec 2024

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Topic: Multithreading

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

-- Accept the stirring input and display no of vowels and total no Words present in the string

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 multithreaded Box Office Movie Total amount collection according to the Total No of Booking, Use Interthread Collection methods wait(),notify(),notifyAll() and yeid() method.

Q.9.

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.10.

Write the difference between Extending thread and implementing runnable?

Q.11.

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.12.

Write a Multithreaded application which demonstrate Bouncing Ball Applet