Object Oriented Programming (PCC-CS593) 2025

ROLL	
NAME	

ASSIGNMENT: V

Sl. No	Program Listing	Signature
1	Write a program to create a child class Mythread by extending the Thread class, override its run() method then, use the start() method to start executing the thread.	
2	Write a program to create a thread class by implementing Runnable interface. Create an object of this class and pass it as an argument to a Thread constructor, then, use the start() method to start executing the thread.	
3	Write three child classes (ThreadA, ThreadB and ThreadC) of Thread class, override its run() method to display a message with iteration number. In the main thread create child three threads one of each class, and set different priority of the threads. Check the result.	
4	Write a class Bracket that contains a method display(String message) to display a String parameter inside a square bracket, call sleep method before the close bracket. Create a child class MyThread that has two instance variable, a message of type String, and a reference of Bracket class, override its run() method to display a message using display method of Bracket class. In the main thread, create one object of Bracket class and two child threads of MyThread class. It produces unexpected results, to overcome the problem use synchronization.	
5	Write a Program to create two methods in a class. In first method make two synchronized block to lock String class and Integer class. In the second method lock the above two classes in the reverse order. Inside main method creates a thread and call the above methods. This will create a deadlock. Remove the deadlock from the code.	
6	Write a program to implement program that implements the solution to the Producer-Consumer problem using synchronization with Semaphores. Implement the shared buffer as an array of type char. The Producer and Consumer objects must each display when they have accessed the shared buffer.	