OOPS Concept – Assignment , 20th July, 2023

1. Write a Java program to illustrate the concept of Encapsulation.
2. Write a Java program to illustrate the concept of Polymorphism.
3. Write a Java program to illustrate the concept of **all types** of Inheritance.
4. Write a Java program to achieve **multiple inheritance** in Java .
5. Write a Java program to showcase the usage of Abstract Class.
6. Write a Java program to demonstrate the usage of Property Class.
7. Write a Java program and **explore all kinds** of Nested ( Inner ) Classes.
8. Write a Java program to override a method of an Anonymous Inner class multiple times and

Explore the scenarios.

1. Write a Java program to illustrate the uses of Static Variables .
2. Write a Java program to illustrate the uses of Static Block and try to explore with the ordering of the Static block inside the class and the respective results when it gets executed from main .
3. Write a Java program to showcase the concept of Static Methods and try to explore the scenarios when a static method tries to access or changes the value or functionality of a non-static member ( like variable , method ).
4. Write a Java program to showcase the concept of Static Class and try to explore what happens when using a static class, we want to access other non-static members of the Outer-Class.
5. Write a Java program to demonstrate the use of Final Variable.
6. Write a Java program to show the **various ways** of initializing a **final blank variable** . ( like a constructor and other ways ).
7. Write a Java program to demonstrate the use of Final Class. Show with an example what is the advantage of declaring a class as Final.
8. Write a Java program to showcase the use of Final Method. Show with an example what is difference of advantage of declaring a method as Final over declaring the entire class as Final.