**Day-2 Java Assignment**

**1. Problem Description:**

What is the main difference between abstract class and interface in Java?

**2. My Solution:**

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| Abstract Class | Interface |
| 1. We cannot create objects of Abstract class.  2. Abstract class contains any number of abstract methods & instance methods.  3. For instance methods implementation is must.  4. For abstract method declaration only allowed. | 1. We cannot create object of Interface, but we will create objects for the implemented classes.  2. Interface contains any number of abstract methods, default & static methods (from Java 8 onwards), private methods (from Java 9 onwards). |
| 5. A class can extend only one Abstract class. If I have multiple abstract classes & want to achieve multiple abstraction in my class then that is not possible. We will need to think of using interfaces here. | 3. A class can implements any number of interfaces. |
| public abstract class Abstraction1  {  }  Public abstract class Abstarctions2  {    }  public class main extends Abstraction1  {  }  Here failed to achieve Abstraction2. So, Abstract class limits the abstraction to achieved. | public interface Abstraction1  {  }  public interface Abstraction2  {  }  public class main implements Abstraction1, Abstraction2  {  }  Here successfully achieved all the abstraction. So, using Interface we can achieve 100% abstraction. |

**3. Review Result:**