**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 object of Abstract class.  2. Abstract class can have all methods as abstract.  3. Abstract class can have few methods abstract and few methods can with body.  4. we can have class as abstract, method as abstract, but not the variable.  5. If a class extending abstract class then the child class must override the abstract methods of the parent class, if not then declare the child class also abstract. | 1. We cannot create object of Interface.  2. Interface can have Un-implemented methods and implemented methods.  3. Using interface we can achieve 100% abstraction.  4. we create Interface using Interface keyword.  5. All the methods in an interface are by default public and abstract.  6. we can create interface reference for implementing class object, so that polymorphism can be achieved.  7. An Interface can have any number of implementing classes.  8. A class can implement multiple interface.  9. An Interface can extends another interface, but can’t implement another interface  10.All the variables inside an interface consider as public static final.  11. After Java 1.8, an interface can have method with body, however that should be declared by default keyword, if we didn’t mention access modifiers automatically it will consider as default method. |