

# MAWLANA BHASHANI SCIENCE AND TECHNOLOGY UNIVERSITY

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DEPARTMENT OF INFORMATION AND COMMUNICATION TECHNOLOGY

## Lab Report

**Lab Report No: 01**

**Lab Report on:** Comparison of abstract classes and interfaces in terms of multiple inheritance.

**Course Title:** Software Engineering and Project Management Lab

**Course Code:** ICT-3108

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## Lab report - 1:

In Java multiple inheritance means a class can get features from more than one parent. An abstract class does not support multiple inheritance.

A class can extend only one abstract class. An interface supports multiple

inheritance in Java. A class can implement more than one interface at the same time. Abstract classes can

have both abstract and normal methods. Interfaces contain only abstract methods.

We use an abstract class when classes are closely related. We use an interface when multiple inheritance is needed.

Therefore, inheritances are used to solve the multiple inheritance problem in Java.

Java code example:

```
interface A {  
    void show ();  
}  
interface B {  
    void print ();  
}  
class Test implements A, B {  
    public void show () {  
        System.out.println ("Interface A");  
    }  
    public void print () {  
        System.out.println ("Interface B");  
    }  
}
```