

LAB 7

```
class Generics <T, U> {
```

```
    T ob1;
```

```
    U ob2;
```

```
    Generics (Tx, Uy) {
```

```
        ob1 = x;
```

```
        ob2 = y;
```

```
    }
```

```
    T getob1() {
```

```
        return ob1;
```

```
    }
```

```
    U getob2() {
```

```
        return ob2;
```

```
    }
```

```
    void display() {
```

```
        System.out.println(" Ob1: " + getob1());
```

```
        System.out.println(" Ob2: " + getob2());
```

```
    }
```

```
    U join() {
```

```
        if (ob1 instanceof Integer && ob2 instanceof Integer) {
```

```
            int i1 = (Integer) getob1();
```

```
            int i2 = (Integer) getob2();
```

```
            return (U) new Integer (i1 + i2);
```

```
        }
```

```
else if (ob1 instanceof Double && ob2 instanceof Double) {  
    double d1 = (Double) getob1();  
    double d2 = (Double) getob2();  
    return (V) new Double (d1 + d2);  
}
```

```
else if (ob1 instanceof String && ob2 instanceof String) {  
    String s1 = (String) getob1();  
    String s2 = (String) getob2();  
    return (V) new String (s1 + s2);  
}
```

```
else {  
    return (V) new String (" ERROR! ob1 & ob2 type mismatch");  
}  
}  
}
```

```
class Gens {
```

```
    public static void main (String[] args) {
```

```
        Generics <Integer, Integer> iobj = new Generics <Integer, Integer> (5, 4);  
        iobj.display();
```

```
        System.out.println ("Sum: " + iobj.join());
```

```
        Generics <Double, Double> dobj = new Generics <Double, Double> (3.05, 4.0);  
        dobj.display();
```

```
        System.out.println ("Sum: " + dobj.join());
```

```
        Generics <String, String> sobj = new Generics <String, String>  
        sobj.display();
```

```
        ("Hello, ", " how are you?");
```

```
        System.out.println ("Concatenation: " + sobj.join());
```

```
    }
```

```
}
```