

LAB-47 Generic

```
import java.io.*;  
import java.lang.*;  
import java.util.*;
```

```
class gen <T>  
{
```

```
    T ob;
```

```
    gen (T o)
```

```
{
```

```
        ob = o;
```

```
}
```

```
    T getob()
```

```
{
```

```
        return ob;
```

```
}
```

```
    void showtype()
```

```
    {  
        System.out.println("Type of T is " + ob.getClass().  
                             getName());  
    }
```

```
class generic
```

```
{
```

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

```
{
```

```
        String n;
```

```
        Scanner sc = new Scanner(System.in);
```

```
        System.out.println("Enter the Integer Number to be  
        displayed using the generic style");  
        n = sc.next();
```

```
gen < Integer > ob1 = new gen < Integer > (Integer.  
    parseInt(n));
```

```
ob1.showtype();
```

```
int val = ob1.getob();
```

```
System.out.println("Value is: " + val);
```

```
System.out.println();
```

```
System.out.println("Enter the string to be displayed  
    using generic style");
```

```
n = sc.next();
```

```
gen < String > ob2 = new gen < String > (n);
```

```
ob2.showtype();
```

```
String x = ob2.getob();
```

```
System.out.println("Value: " + x);
```

```
System.out.println();
```

```
System.out.println("Enter the Double Number to be  
    displayed using generic style");
```

```
n = sc.next();
```

```
gen < Double > ob3 = new gen < Double > (Double.parseDouble(n));
```

```
ob3.showtype();
```

```
double ans = ob3.getob();
```

```
System.out.println("Value: " + ans);
```

```
}  
}
```


LAB-9

```

import java.util.*;
import java.io.*;
import java.lang.*;
class newthread implements Runnable
{
    Thread t;
    newthread()
    {
        t = new thread(this, "CSE");
        System.out.println("CHILD THREAD: " + t);
    }
    public void run()
    {
        try
        {
            for (i;)
            {
                System.out.println("CSE");
                Thread.sleep(2000);
            }
        } catch (InterruptedException e) {
            System.out.println("CSE Thread interrupted");
        }
        System.out.println("Exiting The CSE Thread");
    }
}

class Thread
{
    public static void main (String[] args)
    {

```

```
new Thread nt = new Thread();
```

```
nt.start();
```

```
try {
```

```
for (i; i < 10; i++)
```

```
{
```

```
System.out.println("BMS COLLEGE OF ENGINEERING");
```

```
Thread.sleep(2000);
```

```
}
```

```
} catch (InterruptedException e) {
```

```
System.out.println("Main Thread Interrupted");
```

```
System.out.println("Existing out of the  
main thread");
```

```
}
```

```
}
```


Lab-10MULTIPLICATION THREAD

```
class Table
```

```
{
```

```
void print Table (int n)
```

```
{
```

```
synchronized (this)
```

```
for (int i=1; i<=5; i++)
```

```
system.out.println(n+"*"+i+"="+(n*i));
```

```
try
```

```
Thread.sleep (400);
```

```
}
```

```
catch (Exception e)
```

```
{
```

```
system.out.println(e);
```

```
}
```

```
}
```

```
}
```

```
}
```

```
}
```

```
class mythread1 extends Thread
```

```
{
```

```
Table t;
```

```
Mythread1 (Table t)
```

```
{
```

```
this.t = t;
```

```
}
```

```
public void run()
```

```
{
```

```
t.printTable(5);
}
```

```
}
class MyThread2 extends Thread
{
```

```
Table t;
MyThread2 (Table t)
{
```

```
this.t = t;
}
```

```
public void run()
{
    t.printTable(100);
}
```

```
class Use
{
```

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

```
Table obj = new Table();
```

```
MyThread1 th1 = new
```

```
MyThread1 (obj)
```

```
MyThread2 th2 = new
```

```
MyThread2 (obj);
```

```
th1.start();
```

```
th2.start();
}
```