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1BM19CS135

Synchronous Program

```
import java.util.Scanner;
public class table {
public static void main(String args[]){
cal c = new cal();
Scanner sc = new Scanner(System.in);
System.out.println("input the number of elements");
int n= sc.nextInt();
table obj = new table(n,c,5);
table obj1 = new table(n,c,100);
try {
obj.t.join();
obj1.t.join(); }
catch (Exception e) {
System.out.println("exception occured"); }
System.out.println("thank you");
}}
class table implements Runnable {
int n,tabl;
Thread t;
cal tar;
table(int n, cal c, int tab) {
tabl= tab;
tar= c;
this.n=n;
t= new Thread(this); t.start(); }
public void run() { Synchronized(tar) {
tar.cals(n, tabl); }}}
class cal {
void cals(int n, int ta) {
for(int i=1; i<=n; i++){
System.out.println(ta+"x"+i+"="+(ta*i));
}
}
}
```

```
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public class tables {
public static void main(String args[]) {
        cal c = new cal();
        Scanner sc = new Scanner(System.in);
        System.out.println("input the number of elements");
        int n = sc.nextInt();
        table obj = new table(n,c,5);
        table obj1 = new table(n,c,100);
        try {
                obj.t.join();
                obj1.t.join();
        }catch(Exception e) {
                System.out.println("exception occured");
        }
        System.out.println("thank you");
}
}
class table implements Runnable {
        int n,tabl;
        Thread t;
        cal tar;
        table(int n,cal c,int tab){
                tabl =tab;
                tar=c;
                this.n=n;
                t=new Thread(this);t.start();
        }
        public void run() {
                synchronized(tar) {
                        tar.cals(n, tabl);
                }
        }
}
class cal{
void cals(int n,int ta) {
        for(int i=1;i<=n;i++) {
                System.out.println(ta+" x "+i+" = "+(ta*i));
        }
        }
}
```

```
[poojaraghu@Poojas-MacBook-Pro Desktop % java tables
input the number of elements
6
5 x 1 = 5
5 x 2 = 10
5 x 3 = 15
5 x 4 = 20
5 x 5 = 25
5 x 6 = 30
100 x 1 = 100
100 x 2 = 200
100 x 3 = 300
100 x 4 = 400
100 x 5 = 500
100 x 6 = 600
thank you
poojaraghu@Poojas-MacBook-Pro Desktop %
```