LAB # 7

OBJECTIVE

To Study Pass Objects As Parameter To Methods.

Question:

Write a program to take two values from the user and swap those values by using the concept of arguments passing by reference.

Source Code:

```
package lab7task1;

/**
 *
 * @author Abdul Moiz Chishti
 */
public class Lab7Task1 {

    /**
     * @param args the command line arguments
     */
    static class Swap{
    int first,second,swap;

    Swap(int a, int b){
    first = a;
    second = b;
    }

    void swapping(Swap o){
        o.first=swap;
        o.first=o.second;
        o.swap=o.second;
}
    }
    public static void main(String[] args) {
        // TODO code application logic here

    int a,b;
        a=25;
        b=35;
```

```
        Swap sw=new Swap(a,b);
        System.out.println("Before swapping :\n a = "+sw.first+" b = "+sw.second);
        sw.swapping(sw);
        System.out.println("After swapping :\n a = "+sw.first+" b = "+sw.second);


    }

    }
```

Output:

```
run:
Before swapping :
 a = 25 b = 35
After swapping :
 a = 35 b = 35
BUILD SUCCESSFUL (total time: 0 seconds)
```

Question:

Write a program to take a value from the user and print next 5 values that should be the increment of 10 from the previous value using the concept of returning object

Source Code:

```
package lab7task2;

/**
 *
 * @author Abdul Moiz Chishti
 */
public class Lab7task2 {

    /**
     * @param args the command line arguments
     */

    static class Increment {
    int a;
    Increment(int i) {
    a = i;
    }
    Increment incrByTen() {
```

```
    Increment temp = new Increment(a+10);
    return temp;
}
}
    public static void main(String[] args) {
        // TODO code application logic here

    Increment ob1 = new Increment(10);
    Increment ob2;

    System.out.println("a: " + ob1.a);
    ob2 = ob1.incrByTen();
    System.out.println("a after first increase: " + ob2.a);
    ob2 = ob2.incrByTen();
    System.out.println("a after second increase: "+ ob2.a);
    ob2 = ob2.incrByTen();
    System.out.println("a after third increase: "+ ob2.a);
    ob2 = ob2.incrByTen();
    System.out.println("a after fourth increase: "+ ob2.a);
    }
}
```

Output:

```
run:
a: 10
a after first increase: 20
a after second increase: 30
a after third increase: 40
a after fourth increase: 50
BUILD SUCCESSFUL (total time: 0 seconds)
```

Question:

Write a program to calculate time for 2 different locations by using the concept of arguments passing by value.

Source Code:

```
package lab7task3;

/**
 *
 * @author Abdul Moiz Chishti
```

```
 */
public class Lab7task3 {

    public static class Time{

    int sec,minutes,hours;

    public Time (int sec,int minutes,int hours){

    this.sec=sec;
    this.minutes=minutes;
    this.hours=hours;

    }
    }
    public static void main(String[] args) {
        // TODO code application logic here

    Time time1=new Time(45, 23, 12);
    Time time2=new Time(55, 12, 05);

        System.out.println("Time = Seconds : Minutes : Hours");
        System.out.println("Time 1 = "+(time1.sec)+" : "+(time1.minutes)+" :
"+(time1.hours));
        System.out.println("Time 2 = "+(time2.sec)+" : "+(time2.minutes)+" :
"+(time2.hours));


    }

}
```

Output:

```
run:
Time = Seconds : Minutes : Hours
Time 1 = 45 : 23 : 12
Time 2 = 55 : 12 : 5
BUILD SUCCESSFUL (total time: 0 seconds)
```