

Consider a sequence of the form 0, 1, 1, 2, 4, 7, 13, 24, 44, 81, 149...

Write a method program which takes as parameter an integer n and prints the nth term of the above sequence.
The nth term will fit in an integer value.

Example Input:

5

Output:

4

Example Input:

8

Output:

24

Example Input:

11

Output:

149

For example:

Input	Result
5	4
8	24
11	149

Answer: (penalty regime: 0 %)

```

1 import java.util.Scanner;
2 public class SeqCal{
3     public static void main(String args[]){
4         Scanner obj=new Scanner(System.in);
5         int n=obj.nextInt();
6         int tn=0;
7         if(n==1){
8             System.out.println(0);
9         }else if(n==2 || n==3){
10            System.out.println(1);
11        }else{
12            int t0=0, t1=1, t2=1;
13            for (int i=3;i<n;i++){
14                tn=t0+t1+t2;
15                t0=t1;
16                t1=t2;
17                t2=tn;
18            }
19            System.out.println(tn);
20        }
21    }
22 }
```

	Input	Expected	Got	
✓	5	4	4	✓
✓	8	24	24	✓
✓	11	149	149	✓

Passed all tests! ✓

Consider the following sequence:

1st term: 1

2nd term: 1 2 1

3rd term: 1 2 1 3 1 2 1

4th term: 1 2 1 3 1 2 1 4 1 2 1 3 1 2 1

And so on. Write a program that takes as parameter an integer n and prints the nth terms of this sequence.

Example Input:

1

Output:

1

Example Input:

4

Output:

1 2 1 3 1 2 1 4 1 2 1 3 1 2 1

For example:

Input	Result
1	1
2	1 2 1
3	1 2 1 3 1 2 1
4	1 2 1 3 1 2 1 4 1 2 1 3 1 2 1

Answer: (penalty regime: 0 %)

```

1 import java.util.ArrayList;
2 import java.util.Scanner;
3 public class Main{
4     public static void main(String args[]){
5         Scanner sc=new Scanner (System.in);
6         int n=sc.nextInt();
7         ArrayList<Integer> sequence= new ArrayList<>();
8         sequence.add(1);
9         for(int i=2;i<=n;i++){
10             ArrayList<Integer> temp=new ArrayList<>(sequence);
11             sequence.add(i);
12             sequence.addAll(temp);
13         }
14
15         for (int num : sequence){
16             System.out.print(num + " ");
17         }
18         sc.close();
19     }
20 }
21

```

	Input	Expected	Got	
✓	1	1	1	✓
✓	2	1 2 1	1 2 1	✓
✓	3	1 2 1 3 1 2 1	1 2 1 3 1 2 1	✓
✓	4	1 2 1 3 1 2 1 4 1 2 1 3 1 2 1	1 2 1 3 1 2 1 4 1 2 1 3 1 2 1	✓

Passed all tests! ✓

You have recently seen a motivational sports movie and want to start exercising regularly. Your coach tells you that it is important to get up early in the morning to exercise. She sets up a schedule for you:

On weekdays (Monday - Friday), you have to get up at 5:00. On weekends (Saturday & Sunday), you can wake up at 6:00. However, if you are on vacation, then you can get up at 7:00 on weekdays and 9:00 on weekends.

Write a program to print the time you should get up.

Input Format

Input containing an integer and a boolean value.

The integer tells you the day it is (1-Sunday, 2-Monday, 3-Tuesday, 4-Wednesday, 5-Thursday, 6-Friday, 7-Saturday). The boolean is true if you are on vacation and false if you're not on vacation.

You have to print the time you should get up.

Example Input:

1 false

Output:

6:00

Example Input:

5 false

Output:

5:00

Example Input:

1 true

Output:

9:00

For example:

Input	Result
1 false	6:00
5 false	5:00
1 true	9:00

Answer: (penalty regime: 0 %)

```
1 import java.util.Scanner;
2 public class Main{
3     public static void main(String args[]){
4         Scanner sc=new Scanner(System.in);
5         int day=sc.nextInt();
6         boolean isVacation=sc.nextBoolean();
7         String wakeUpTime="";
8         if(isVacation){
9             if(day==1 || day==7){
10                 wakeUpTime="9:00";
11             }else{
12                 wakeUpTime="7:00";
13             }
14         }else{
15             if(day==1 || day==7){
16                 wakeUpTime="6:00";
17             }else{
18                 wakeUpTime="5:00";
19             }
20         }
21         System.out.println(wakeUpTime);
22         sc.close();
23     }
24 }
```

	Input	Expected	Got	
✓	1 false	6:00	6:00	✓
✓	5 false	5:00	5:00	✓
✓	1 true	9:00	9:00	✓

Passed all tests! ✓

[◀ Lab-02-MCQ](#)

Jump to...

[Lab-03-MCQ ▶](#)