https://course.acciojob.com/idle?question=9b236421-7977-48a9-86b7-8890b98a071a

- MEDIUM
- Max Score: 40 Points

Number of ways to form Natural Number

Find number of ways an integer N can be represented as a sum of unique natural numbers.

Input Format

First line contains a single integer N.

Output Format

Print a single integer containing number of ways.

Example 1

Input

```
6
```

Output

```
4
```

Explaination

6 can be represented as (1, 2, 3), (1, 5), (2, 4), (6)

Example 2

Input

```
7
```

Output

```
5
```

Explaination

7 can be represented as (1, 2, 4), (1, 6), (2, 5), (3, 4), (7)

Constraints

```
0 <= N <= 120
```

Topic Tags

- Recursion

My code

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

public class Main
{
  static int way(int n,int i)
  {
    if(i>=n)return 0;
     int sum=0;
    while(i<n)
```

```
      {
        int a=way( n-i-1,++i);
        sum=sum+a;
      }
    return 1+sum;
  }
        public static void main (String[] args) throws
java.lang.Exception
        {
                //your code here
      Scanner s=new Scanner(System.in);
      int n=s.nextInt();
      System.out.print(way(n,0));
        }
}
```