**Problem B**

**Integer Partition**

Input File: pb.in

Time Limit: 5 seconds

A new partition problem is defined as follows. Let the symbol *Py,zi* be the number of ways to write a positive integer *y* as a sum of *i* positive integers having the largest part no larger than *z*, i.e.,

*y* = *a*1+*a*2+…+*a*i, and *z* >= *a*1 >= *a*2 … >= *ai* >= 1

Notice that two sums differing only in the order of their summands are considered to be the same partition. For example, *P*25,4 = 2 (can be partitioned in two distinct ways: 4+1, 3+2) and *P*25,3­ = 1 (can be partitioned in one single way: 3+2).

Please write a program to compute the number of *Piy,z* with given integers *y*, *i*, and *z*, which y may be as large as up to 500.

**Technical Specification**

1. 1 <= *y* <= 500
2. 1 <= *i* <= 50
3. 1 <= *z* <= 100

The first line of the input file contains one integer *m*(<= 5) indicating the number of test cases to following m lines, there are three integers *y*, *i*, and *z*.

For each test case, output *Piy,z*.