Problem Statement

A pair of positive integers (a, b) is called **special** if ⌊a/b⌋=a **mod** b. Here, ⌊a/b⌋ is the result of the integer division between a and b, while a **mod** b is its remainder.

For any given two integers x and y, write a program to find the number of special pairs (a, b) numbers such that 1≤a≤x and 1≤b≤y. The number in the first line denotes the number of test cases i.e. the number of pairs of x, y for which you have to solve.

The language of submission for code is python. You can use any of the eligible libraries as mentioned in the rules and regulations.

Submission Format

Three files are expected from you put together in a .zip file, for it to be qualified as a valid submission. See details for the files and their extensions. Please ensure that these files are actually zipped directly, and not any folder which contain these files.

You shall submit the following files as a zip file for this submission:

- Q6_Explanation.docx
- Q6.py.
- The updated SampleSubmission.csv which was provided with this problem with your predictions in the format mentioned below as Q6.csv. The file will contain results for the five input test cases in the first column.

0
1
0
3
6

A sample python file with the format has been provided to you as Q6.py, you need to fill your logic in the function generate_result.

Evaluation Criteria

We shall measure submissions on the criteria:

Accuracy metric as the evaluation criteria.

Primarily we shall use the provided test cases for test to form a cutoff.

We shall use extra out-of-sample input test cases not provided to you for final scoring.