**Python Numbers Toolbox**

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| --- | --- | --- |
| **Type** | **Example** | **Convert to:** |
|  |  |  |
|  |  |  |

**Special Operations**

|  |  |  |
| --- | --- | --- |
| **Operator** | **Examples** | **Notes** |
| **//** |  |  |
| **%** |  |  |
| **\*\*** |  |  |

**Useful Functions**

|  |  |  |
| --- | --- | --- |
| **Function** | **Result** | **Notes** |
| **abs(-4)** |  |  |
| **abs(4)** |  |  |
| **round(54.5)** |  |  |
| **import math**  **math.floor(6.2)** |  |  |
| **import math**  **math.floor(6.9)** |  |  |
| **import math**  **math.ceil(6.2)** |  |  |
| **import math**  **math.sqrt(56)** |  |  |



**Number Exercises - No if-statements allowed**

1. Your task is to find the nearest square number, of a positive integer n.

2. Round an int to the nearest 5. No if-statements allowed.

3. Given an int, print out X's in rows of 5, with any leftover on the last row. Example:

>17

X X X X X

X X X X X

X X X X X

X X

4. There are two teams, Team 4 and Team 7. If it is team 4's turn, switch to team 7. If it is team 7's turn, switch to team 4. (NO IF STATEMENTS)

Example:

Who's turn is it?

>4

It is team 7's turn.

4. Determine if an integer number is prime.

5. Convert a string in binary to a decimal int (no special functions allowed!)

6. Convert a number in decimal to a binary string (no special functions allowed!)

7. Determine the GCD (greatest common divisor) between two numbers