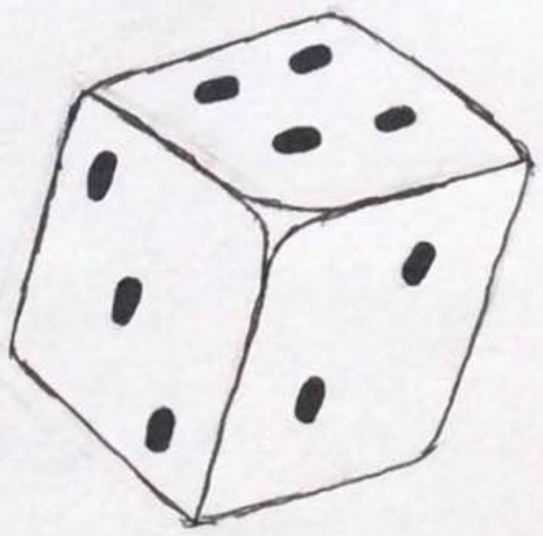
ROLL the DIE in python



Goals:

- Create an efficient die rolling simulator
- import a library and use a function from it.
- print the result
- practice input statements
- learn about while loops

Step 1: Import 'Random' Library

```
import random
```

↑ code snippet

You are importing a python library called random.

A library is a collection of functions and methods.

The 'random' library generates pseudo random numbers for various distributions.

Step 2: Generate and Print one Roll

```
print(random.randint(1,6))
```

`random.randint()` is a function of the random library that generates a random integer between and including the given parameters. Since we are simulating a 6 sided die, we will use 1 to 6.

* Run this line before continuing to make sure it generates one roll.

Step 3: Ask for the Number of Rolls

```
num_rolls = input("How many times to roll the die: ")
```

Create an input statement which prompts the user to give the number of times they want the die to be rolled. This input will be saved to num_rolls as a string.

Step 4: Implement a While Loop

```
ctr = 0
while (ctr < int(num_rolls)):
    print(random.randint(1,6))
    ctr = ctr + 1
```

`int(num_rolls)` converts the number saved from an str to an int value.

A while loop allows code to be executed repeatedly based on a boolean condition. As long as the statement is true, the while loop executes.

In our case, the boolean ~~statement~~ is

```
ctr < int(num_rolls)
```

So as long as the condition remains true (the ctr is less than the number given) the loop generates a roll.

The ctr variable indexes through, starting at 0 (as we initialized it) and going up by one in each iteration, as shown in

```
ctr = ctr + 1
```

Example run:

```
How many times to roll the die: 5
6
6
5
1
3
```

Challenge: Manipulate your code to simulate a die with a different number of sides!

Enjoy your Dice Simulator!