In-class Exercises 7

1) Write an iterative function to calculate a factorial value (n!). e.g., 6! = 6x5x4x3x2x1.

2) Write a recursive function to calculate a factorial value.

3) Write a function that produces random recursive sentences. Specifically, the user gives the program a list of nouns. The program starts the sentence by randomly selecting one noun X and prints “The X was bored.” Then, as long as the user wants, it selects more sentences, which are added along the following line: “The X who chased Y who chased Z … was bored”. Choose the word by randomly generating a number using the following command. This produces an integer in the range of a and b.

```python
import random
mynum = random.randrange(a, b)
```