Guess the number Game using Python

This is a Guess the Number game.

The computer will think of a number between 1 and 20. You need to guess it within the stipulated number of guesses.

This program demonstrates the binary search algorithm

In order to make the game interesting, we need to use random numbers. So lets import the relevant package

```python
import random
```

```python
#We need a variable to track the number of guesses
guessesTaken = 0
```

```python
#Introduction and receiving name of user as input
print('Hello! What is your name?')
myName = input()
```

```python
# Let us generate the random number which is what the computer thinks of.
number = random.randint(1, 20)
print('Well, ' + myName + ', I am thinking of a number between 1 and 20.')
```

```python
# for loop is used to give chance for user to guess. But only six times.
for guessesTaken in range(6):
    # Receive user guess as input
    print('Take a guess.') # Four spaces in front of "print".
    guess = input()
    guess = int(guess)
    # let us give user feedback about the guess
    if guess < number:
        print('Your guess is too low.') # Eight spaces in front of "print"
```

```python
        if guess > number:
            print('Your guess is too high.')
        # If user guesses correctly, exit the for loop
        if guess == number:
            break


# give user final feedback about success or failure in guessing
if guess == number:
    guessesTaken = str(guessesTaken + 1)
    print('Good job, ' + myName + '! You guessed my number in ' + guessesTaken + ' guesses!')


if guess != number:
    number = str(number)
    print('Nope. The number I was thinking of was ' + number + '.')
# go to www.nostarch.com/inventwithpython for more examples and further learning
```