

Coin Flip

You are provided this flip function:

```
function flip() {  
  return Math.random() >= 0.5;  
}
```

You must implement a randomNumber(n) function that generates a random number greater than or equal to 0, and less than input n.

- n must be greater than 0
- n must be less than 1,000,000
- Your only source of randomness must be the provided flip() function
- You cannot use Math.random in your implementation
- You can use Google to figure out how to do this

```
function randomNumber(n) {  
  /*  
    Your implementation, using the flip() function  
  */  
  
  // Returns a number between [0, n)  
}
```

An example execution of your function:

```
randomNumber(500) // returns 123  
randomNumber(1) // returns 0  
randomNumber(500) // returns 466  
randomNumber(1000001) // throw error
```