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1 import random
2 import math
3 smaller = int(input("enter smaller number : "))
4 greater = int(input("enter greater number : "))
5 b = random.randint(smaller, greater)
6 print("\n\tyou've only",round(math.log(greater -
    smaller + 1, 2)) , "chances to guess the integer!\n")
7 count = 0
8 while count < math.log(greater - smaller + 1, 2) :
9     count += 1
10    guess = int(input(" guess a number:"))
11    if b == guess :
12        print("congratulations you did it in ",count
    , "try")
13        break
14    elif b > guess :
15        print ("you guessed too low!")
16        if b < guess :
17            print("you guess too upper!")
18 if count >= math.log(greater - smaller + 1, 2):
19     print("\nthe number is %d" % b)
20     print("\tbetter luck next time !")
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