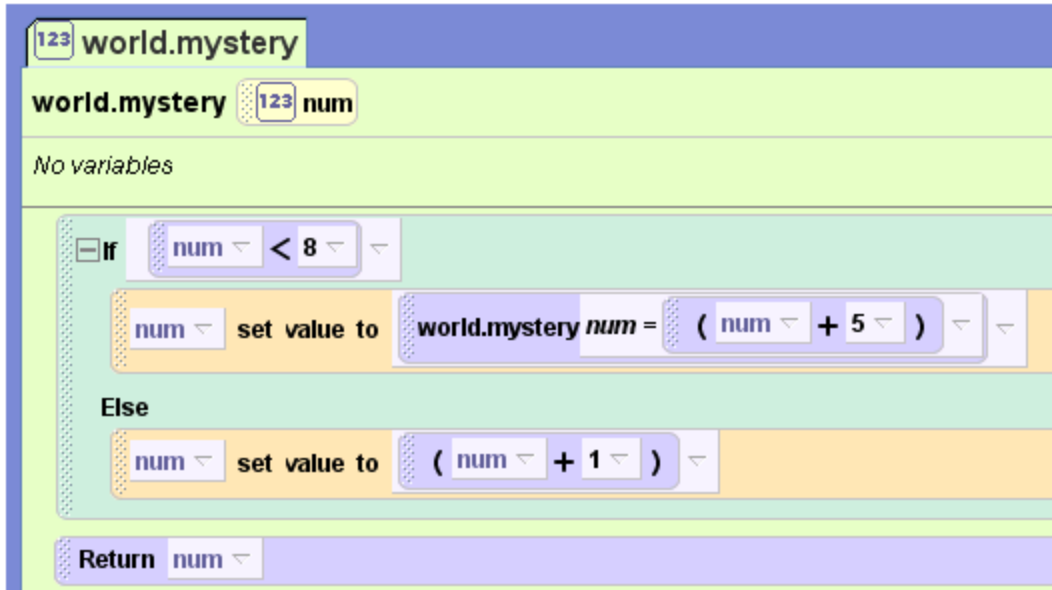


### Problem 3

Part 1 - Consider the following recursive function world.mystery whose lines are numbered.



```
123 world.mystery
world.mystery 123 num
No variables
1 if num < 8
2   num set value to world.mystery num = ( num + 5 )
3 else
4   num set value to ( num + 1 )
5 return num
```

- A. Which line of code has recursion?
- B. Explain where the “way out” of the recursion is.
- C. What is the output of the following code? Explain how you get the answer for each (what values are passed in the recursive calls?)



```
print world.mystery num = 1
print world.mystery num = 10
print world.mystery num = 7
```

Part 2 - Now add this mystery function to your world and print the calls with num=1, 10 and 7.