Wait for the user to press Enter (return)

- Sometimes we want the user to press Enter when they are ready:

Think of a number (press enter to continue):
Add 5 to the number (press enter to continue):
Times the number by 4 (press enter to continue):
Subtract 8 (press enter to continue):
Times the number by 2 (press enter to continue):
Divide the number by 8 (press enter to continue):
Subtract your original number (press enter to continue):

Any number such as 408
Add 5: 413
Times 4: 1652
Subtract 8: 1644
Times by 2: 3288
Divide by 8: 411
Subtract original number: 3

================================
The number you now have is 3
================================
Wait for the user to press Enter (return)

- Code for the previous slide.

```python
def prompt_continue(prompt):
    ... #code is left out here

def display_details():
    number = random.randrange(0, 500)
    ... #code is left out here
    display_final_number(number)

def display_final_number(number):
    ...

message = " (press enter to continue)"
prompt_continue("Think of a number" + message)
prompt_continue("Add 5 to the number" + message)
prompt_continue("Times the number by 4" + message)
prompt_continue("Subtract 8 (press enter to continue)"")
prompt_continue("Times the number by 2" + message)
prompt_continue("Divide the number by 8" + message)
prompt_continue("Subtract your original number" + message)
display_details()
```
Madlibs

- A madlib is the name for a simple game. The idea is to take a sentence and remove some words. You then ask someone to enter some words which fit the same general category as the removed words and see the new sentence which is created:

  - [Mary] had a little [lamb], its fleece was [white] as [snow]. Everywhere that [Mary] went, the [lamb] was sure to [go].

  - [NAME] had a little [ANIMAL], its fleece was [COLOUR] as [PLURAL_NOUN]. Everywhere that [NAME] went, the [ANIMAL] was sure to [ACTION].

- Think about the functions needed to write this program (2 functions) and write the main() function code for this program.
Madlibs

- From the previous slide.

#write the main code below
def function1():
    print("A")
    function2(3)
    print("B")

def function2(num):
    print("C")
    function4(num - 1, num - 2)
    print("D")

def function3(number):
    print("E", number)

def function4(num1, num2):
    print("F")
    function3(num1 + num2)

def main():
    print("G")
    function1()
    main()
Complete the code trace of the program and show the output.

```python
1 def first(a):
   b = 3
   print("1", a)
   return second(a * b) + b

2 def second(a):
   print("2", a)
   return a % 4

3 def main():
   a = 5
   b = first(a)
   print("3", b)
   b = second(b)
   print("4", b)

4 main()
```

1 5
2 15
3 6
2 6
4 2