

```
1  """
2  CS241 Homework 7
3  Written by Chad Macbeth
4  """
5
6  def fib(n):
7      # Base Cases
8      if n <= 0:
9          return 0
10     elif n == 1:
11         return 1
12     elif n == 2:
13         return 1
14
15     # By definition: fib(n) = fib(n-1) + fib(n-2)
16     return fib(n-1) + fib(n-2)
17
18 # Print out the first 20 fib numbers
19 for i in range(20):
20     print("fib({}) = {}".format(i, fib(i)))
21
22 # By the way, this is not wise for larger values of 20. The
23 # 100th Fib number is 354,224,848,179,261,915,075. This can not be done
24 # with recurrision. You can solve this problem a lot easier with a loop.
25
26 # With that said, this is a really easy one to see how recursion works.
27
28
```