

Problem 4: Fibonacci Flier

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The Fibonacci sequence is one of the most famous sequences of numbers in mathematics. The first Fibonacci number is 1, the second Fibonacci number is 1, and in general, the next Fibonacci number in the sequence is the sum of the previous two. The first few numbers in the sequence are 1, 1, 2, 3, 5, 8, 13, 21.

Your job is to write a HMMM assembly language program that takes a single input from the user, call it n , and prints the first n Fibonacci numbers.

You will likely want to copy the contents of one register rX into another rY during the course of this problem. Take a look at the [HMMM reference page](#) (or the on-line documentation)—the command for copying $r1$ into $r2$, i.e., $r2 = r1$ in Python, is

```
copy r2 r1
```

Note that this instruction moves data from right-to-left, which mimics Python's assignment statements, e.g., $y = x$ assigns x 's value into y .

For this problem, you may assume that the input n will always be at least 2. Here is one sample input and output:

```
Enter number: 10
```

```
1
1
2
3
5
8
13
21
34
55
```

Remember to have a comment for every line of code that you write. Also, test your program carefully, starting at $n = 2$.