

## Challenge 3: Fibonacci Sequence

Practice your concepts of recursion by writing a function to calculate the Fibonacci sequence.

### We'll cover the following ^

- Problem Statement
  - Input
  - Output
  - Sample Input
  - Sample Output
- Coding Exercise

## Problem Statement #

In this exercise, you have to write a recursive function `fibonacci` that takes an integer `range` as a parameter and returns the  $n$ th number from the [Fibonacci Sequence](#) where  $n$  is the value of the `range` variable.

## Input #

an integer

## Output #

$n$ th value of the fibonacci sequence.

## Sample Input #

```
$range = 7
```

## Sample Output #

The fibonacci sequence up till the 7th index will be as follows:

```
0 1 1 2 3 5 8 13
```

Therefore, the output will be:

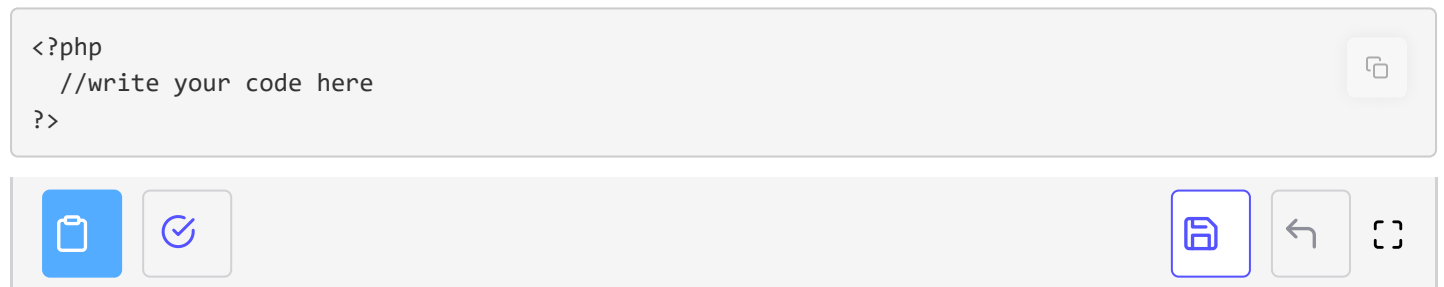
Therefore, the output will be:

13

## Coding Exercise #

Write your code in the code widget below. If you don't get it right, don't fret; the solution is also given.

```
<?php
//write your code here
?>
```

A code widget interface with a light gray background. The top section contains a code editor with the text: `<?php`, `//write your code here`, and `?>`. To the right of the code editor is a small square icon with a copy symbol. Below the code editor is a horizontal bar with five icons: a blue square with a white document icon, a light gray square with a blue checkmark icon, a light gray square with a blue floppy disk icon, a light gray square with a blue left arrow icon, and a light gray square with a blue double square icon.

Let's solve a brief quiz in the next lesson, before moving on to strings in the next chapter.