# Hooks

Hooks are a way of one piece of code to interact/modify another piece of code at specific, pre-defined spots. They make up the foundation for how plugins and themes interact with WordPress Core, but they’re also used extensively by Core itself.

There are two types of hooks: **Actions** and **Filters**. To use either, you need to write a custom function known as a Callback, and then register it with a WordPress hook for a specific action or filter.

**Actions** allow you to add data or change how WordPress operates. Actions will run at a specific point in the execution of WordPress Core, plugins, and themes. Callback functions for Actions can perform some kind of a task, like echoing output to the user or inserting something into the database. Callback functions for an Action do not return anything back to the calling Action hook.

**Filters** give you the ability to change data during the execution of WordPress Core, plugins, and themes. Callback functions for Filters will accept a variable, modify it, and return it. They are meant to work in isolated manner, and should never have side effects such as affecting global variables and output. Filters expect to have something returned back to them.

We can also create our own hooks so that other developers can extend and modify my plugin and theme.

## Actions vs Filters

The main difference between an action and a filter can be summed up like this:

* An action takes the info it receives, does something with it, and returns nothing. In other words: it acts on something and then exits, returning back to the calling hook.
* A filter takes the info it receives, modifies it somehow, and returns it. In other words: it filters something and passes it back to the hook for further use.

In alternative way,

* An action interrupts the code flow to do something, and then returns back to the normal flow without modifying anything;
* A filter is used to modify something in a specific way so that the modification is then used by code later on.