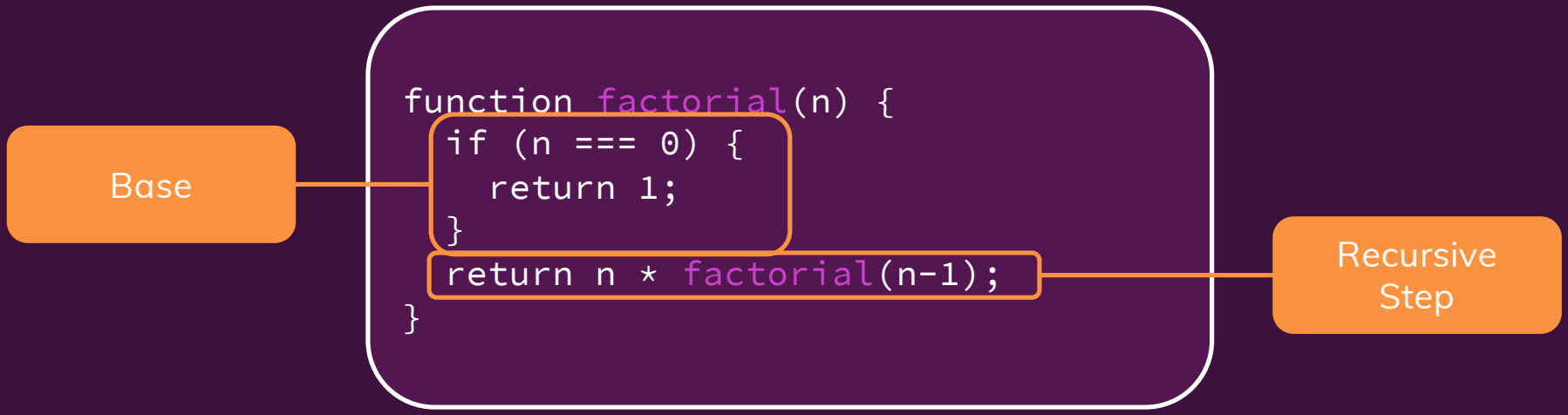
What is “Recursion”?

We talk about “Recursion” when a function calls itself.

```
function callMe() {
  return callMe();
}
```

More Details & Why

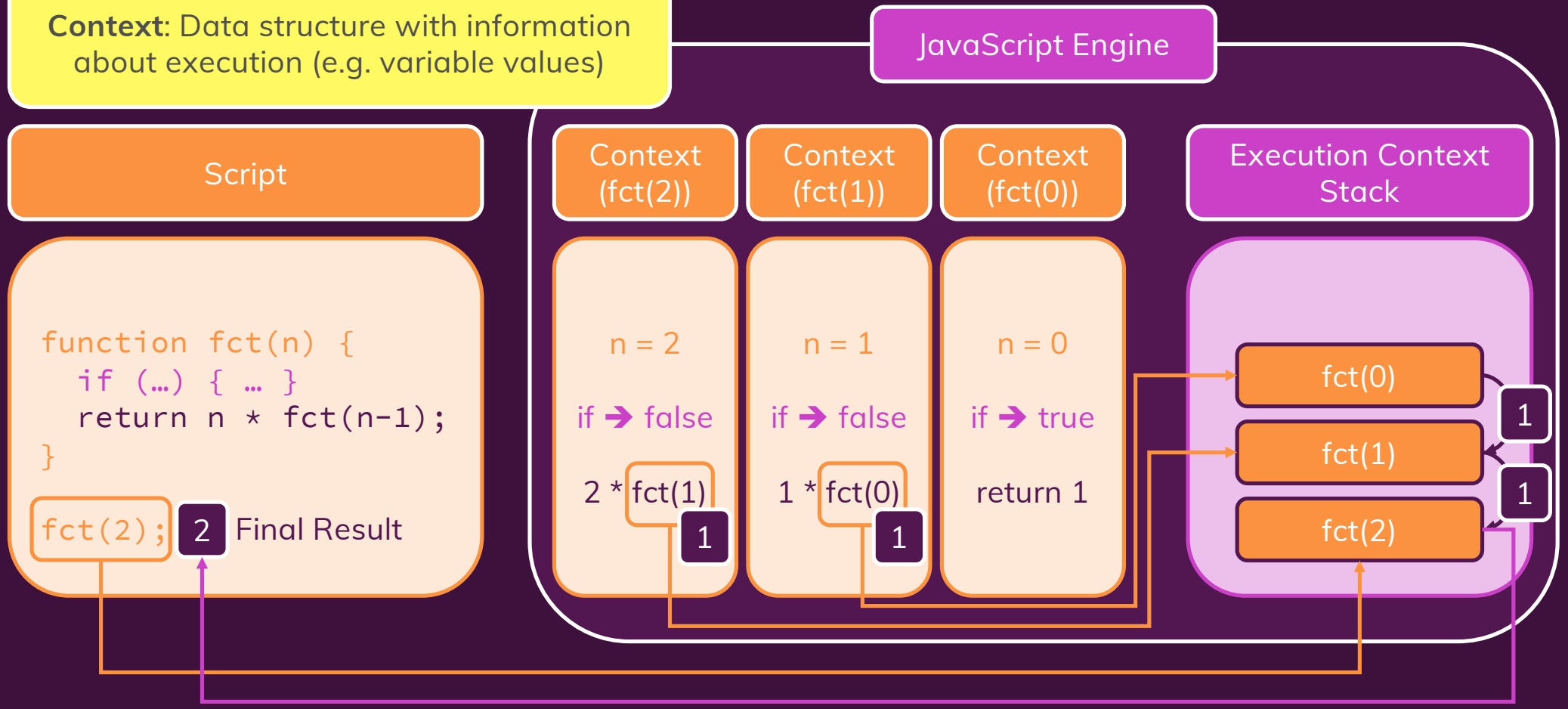


Recursion helps solve problems which are **otherwise impossible** (or very hard) to solve (e.g. traversals) or sometimes **provides more concise code alternatives**.

ACADEMIND

Under the Hood: Context & Stack

Context: Data structure with information about execution (e.g. variable values)



ACADEMIND

Summary – Recursion

"Recursion" is a key programming concept where a function calls itself (from inside the function).

Recursion **can often be used** to **replace loops**.

In addition, for some problems (e.g. **tree traversal**) recursion often is **the only (or by far easiest) solution.**

Recursion always requires **a base case** (an exit condition) and a **recursive step** (where a function calls itself).

Recursion can be **analyzed** with `console.log()`s but also with the browser developer tools (**breakpoints + step-by-step code execution**).