

Here are 10 examples of array functions in various programming languages:

1. `foreach()`: This function iterates over each element in an array and executes a provided callback function.
2. `filter()`: This function filters an array by creating a new array containing only the elements that pass a provided test function.
3. `map()`: This function transforms an array by mapping each element to a new value using a provided callback function.
4. `reduce()`: This function combines all elements in an array into a single value using a provided reducer function.
5. `sort()`: This function sorts an array in ascending or descending order.
6. `join()`: This function joins all elements in an array into a string using a specified separator.
7. `slice()`: This function extracts a portion of an array by selecting a range of elements.
8. `push()`: This function adds an element to the end of an array.
9. `pop()`: This function removes and returns the last element from an array.
10. `shift()`: This function removes and returns the first element from an array.

Regarding pass by value and pass by reference, they refer to how arguments are passed to functions in programming languages.

Pass by value: In pass by value, a copy of the argument is passed to the function. Any changes made to the argument within the function do not affect the original value.

Pass by reference: In pass by reference, the reference to the original argument is passed to the function. Any changes made to the argument within the function affect the original value.

Pass by value is more common in languages like Java and Python, while pass by reference is more common in languages like C and C++.

Finally, `map`, `filter`, and `reduce` are higher-order functions that operate on other functions.

`map`: Applies a function to each element of an array and returns a new array containing the transformed values.

`filter`: Creates a new array containing only the elements of the original array that pass a specified test function.

`reduce`: Combines all elements of an array into a single value using a specified reducer function.