

Strong Number

$$145 \rightarrow (1! + 4! + 5!) = 145 \quad \checkmark$$

$$96 \rightarrow (9! + 6!) = 96 \quad \times$$

Examples of Strong Number: 1, 2, 145, and 40585

Passing by Value vs Passing by Reference

```
function func1($n)
{
    $n = 10;
}
```

New local variable \$n created and changed as 10. Original \$n value remained unchanged

```
$n = 70; {
func1($n); }
```

Variable n created and stored with value 70. Then passed to func1

Passing by value

```
function func1(&$n)
{
    $n = 10;
}
```

&(ampersand) symbol denoting reference will be passed

```
$n = 70;
func1($n);
```

Local variable \$n shares same memory address as actual \$n passed to it. Hence, \$n = 10 will be reflected to the original variable

Passing by Reference

Callback Function

```
function hello(){
    echo "Job Started!";
}

function bye(){
    echo "Job Done! Bye!";
}

function sum($a, $b, $greet1, $greet2){
    $greet1();
    echo "Sum of $a and $b is: " . ($a + $b);
    $greet2();
}
```

By passing functions as parameters we can invoke them within another function this allows a programmer to pass different functions in certain scenario, without changing the meaning and design of the original driver function. Here, \$greet1 and \$greet2 are callback functions in PHP