Go Pointer

A pointer is a variable that stores the address of another variable. The general form of a pointer variable declaration is:

```
var var_name *var-type
```

A newly declared pointer which has not been assigned to a variable has the nil value.

The address-of operator &, when placed before a variable gives us the memory address of the variable.

With pointers, we can pass a reference to a variable (for example, as a parameter to a function), instead of passing a copy of the variable which can reduce memory usage and increase efficiency.

Example :-

```go
package main

import "fmt"

func main() {
    x := 10
    fmt.Println("Value of x before using changeX
function ", x)
    changeX(&x)
    fmt.Println("Value of x after using changeX
function ", x)
}
func changeX(x *int) {
    *x = 0
}
```

Output :-

```
Value of x before using changeX function  10
Value of x after using changeX function  0
```