

# Learn Go: Loops

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- an initial statement which creates a new variable,
- a conditional expression that determines if the loop runs,
- and a post statement that runs each time the loop completes.

```
for number := 0; number < 5; number++ {  
    fmt.Print(number)  
}
```

**An indefinite loop repeats while a condition remains true.**

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```
number := 0 // Initialize a variable to  
be used inside the loop  
for number < 5 {  
    fmt.Println(number)  
    number++ // Update the variable being  
used  
}
```

**In Go, the language is simplified by using only the `for` keyword for both definite and indefinite loops.**

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```
for {  
    // Loop body logic  
    // This repeats forever  
}  
  
// This is never reached
```

**The break keyword stops the loop at the current iteration.**

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```
animals := []string{"Cat", "Dog",  
    "Fish", "Turtle"}  
for index := 0; index < len(animals);  
index++ {  
    if animals[index] == "Dog" {  
        fmt.Println("Found the perfect  
animal!")  
        break // Stop searching the array  
    }  
}
```

**The continue keyword skips the loop to the next iteration.**

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```
jellybeans := []string{"green",  
    "blue", "yellow", "red", "green",  
    "yellow", "red"}  
for index := 0; index < len(jellybeans);  
index++ {  
    if jellybeans[index] == "green" {  
        continue  
    }  
    fmt.Println("You ate the",  
jellybeans[index], "jellybean!")  
}
```

**In Go, the range keyword can be used in a map or array to work through each contained item one at a time within a loop.**

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```
letters := []string{"A", "B", "C",  
"D"}  
  
for index, value := range letters {  
    fmt.Println("Index:", index,  
    "Value:", value)  
}
```

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