

Exercise: Sum of Squares

Have fun with this exercise on select statements!

In this exercise, you are required to calculate the sum of squares of the numbers given using `select` statements, `goroutines` and `channels`.

$$\begin{aligned} &1, 2, 3, 4, 5 \\ &= (1)^2 + (2)^2 + (3)^2 + (4)^2 + (5)^2 \\ &= 1 + 4 + 9 + 16 + 25 \\ &= 55 \end{aligned}$$

Sum Of Squares

You have been provided with a skeleton in the code widget below. Pretty much everything is done for you except for the `SumOfSquares` function. You should be able to solve this problem using two channels and one goroutine. Let's have a look at the `main` function.

```
func main() {
    mychannel := make(chan int)
    quitchannel:= make(chan int)
    sum:= 0
    go func() {
        for i := 0; i < 6; i++ {
            sum += <-mychannel
        }
        fmt.Println(sum)
    }()
    SumOfSquares(mychannel, quitchannel)
}
```

So we have to calculate the `sum` of squares of numbers from `1` to `5` which equals `55`. You will need to send values from the `mychannel` passed into the `SumOfSquares` function to be received by `<-mychannel` in the main routine. In addition, you need to find a way to get out of the select statement that you will implement in the `SumOfSquares` function.

Remember that you have to implement the `SumOfSquares` function using the `select` statement.

Current Output:

No output

Expected Output:

55

 Show Hint

```
package main
import "fmt"

func SumOfSquares(c, quit chan int) {
}

func main() {
    mychannel := make(chan int)
    quitchannel:= make(chan int)
    sum:= 0
    go func() {
        for i := 0; i < 6; i++ {
            sum += <-mychannel
        }
        fmt.Println(sum)
    }()
    SumOfSquares(mychannel, quitchannel)
}
```



SumOfSquares

Do keep trying to solve this exercise until you get the correct output before moving on to the solution review in the next lesson.