

EXERCISES

Exercise Solutions to below problems:

https://github.com/GoesToEleven/GolangTraining/tree/master/13_exercise-solutions

1. Create a program which prints "Hello World" to the terminal.
2. Modify the previous program so that instead of printing Hello World it prints Hello, my name is followed by your name.
3. Create a program that prints to the terminal asking for a user to enter their name. Use `fmt.Scan` to read a user's name entered at the terminal. Print "Hello <NAME>" with <NAME> replaced with what the user entered at the terminal.
4. Create a program that prints to the terminal asking for a user to enter a small number and a larger number. Print the remainder of the larger number divided by the smaller number.
5. Print all of the even numbers between 0 and 100.
6. Write a program that prints the numbers from 1 to 100. But for multiples of three print "Fizz" instead of the number and for the multiples of five print "Buzz". For numbers which are multiples of both three and five print "FizzBuzz".
7. If we list all the natural numbers below 10 that are multiples of 3 or 5, we get 3, 5, 6 and 9. The sum of these multiples is 23. Find the sum of all the multiples of 3 or 5 below 1000.

Exercise Solutions to below problems:

https://github.com/GoesToEleven/GolangTraining/tree/master/16_exercise-solutions

1. Write a function which takes an integer. The function will have two returns. The first return should be the argument divided by 2. The

second return should be a bool that let's us know whether or not the argument was even. For example:

- a. `half(1)` returns `(0, false)`
 - b. `half(2)` returns `(1, true)`
2. Modify the previous program to use a func expression.
 3. Write a function with one variadic parameter that finds the greatest number in a list of numbers.
 4. What's the value of this expression: `(true && false) || (false && true) || !(false && false)`?
 5. Write a function, `foo`, which can be called in all of these ways:

```
func main() {  
    foo(1, 2)  
    foo(1, 2, 3)  
    aSlice := []int{1, 2, 3, 4}  
    foo(aSlice...)  
    foo()  
}
```

6. Find a problem at projecteuler.net then create the solution. Add a comment beneath your solution that includes a description of the problem. Upload your solution to github. Tweet me a link to your solution.