

# TDD Golang

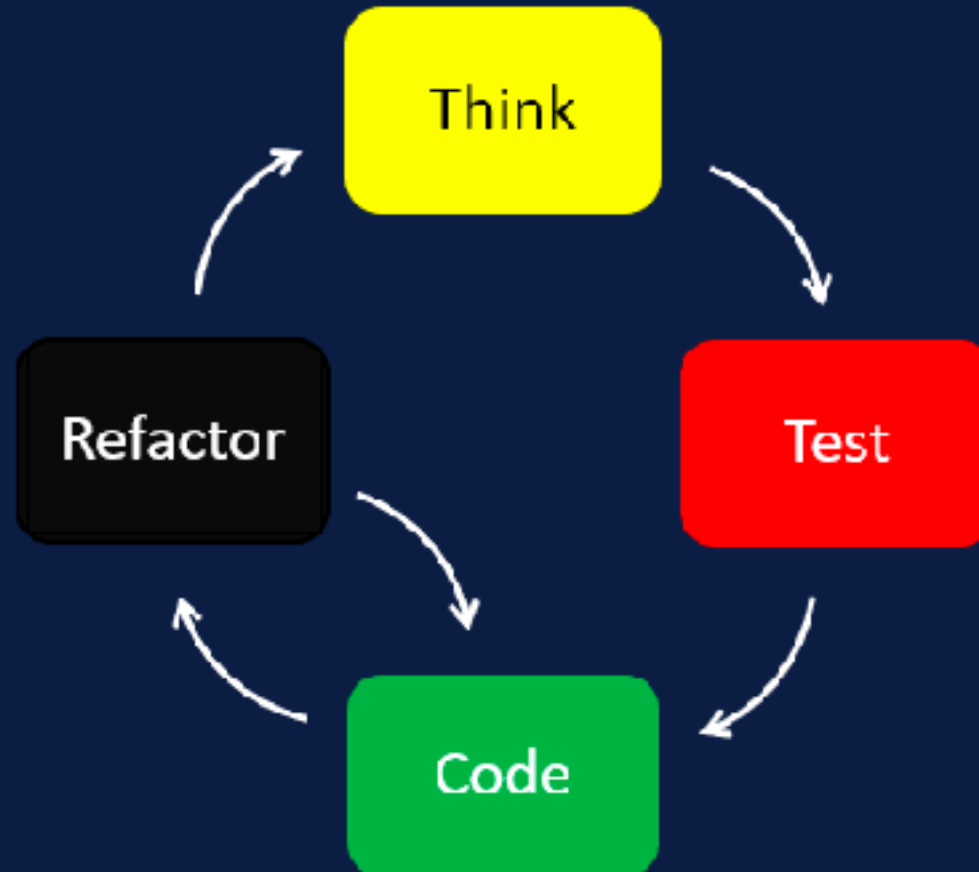
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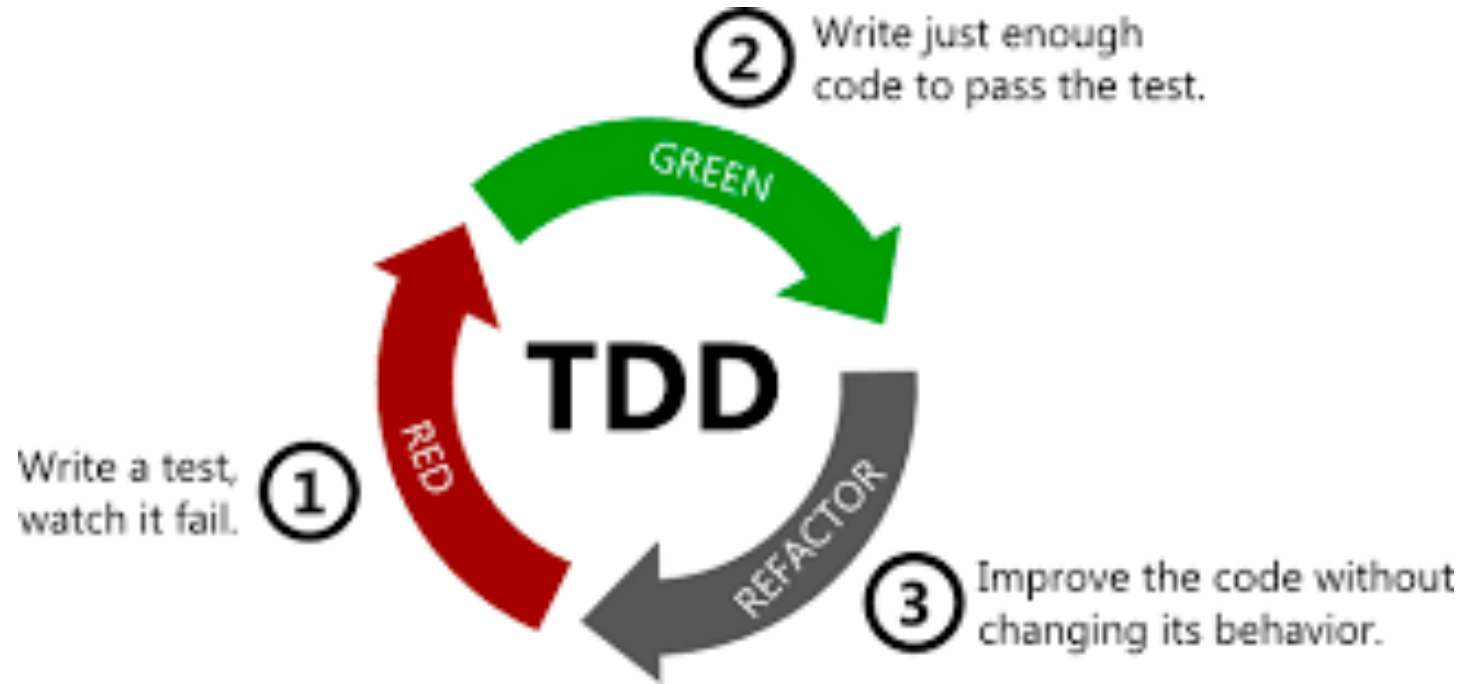
TDD

# Test Driven Development (TDD)





TDD





# TDD: Unit Tests



# Testing in GO

File Name: xxx\_under\_test\_test.go

```
func Test_Description(t *testing.T) {  
    // Arrange  
  
    // Act  
  
    // Assert  
  
}
```



# Exercise

1. Tennis
2. PrimeFactors
3. FizzBuzz
4. LCD Number
5. Vending Machine



# Tennis

A	B	Display
0	0	Love-Love
1	0	Fifteen-Love
2	0	Thirty-Love
3	0	Forty-Love
4	0	Win for A

A	B	Display
3	3	Deuce
4	3	Advantage for A
5	3	Win for A



# PrimeFactors

Number	Prime-factor
4:	2 2
24:	2 2 2 3
10:	2 5
19:	19
34:	2 17





# FizzBuzz

Number	Say
1	1
2	2
3	Fizz
4	4
5	Buzz
6	Fizz
7	7
8	8

Number	Say
9	Fizz
10	Buzz
11	11
12	Fizz
13	13
14	14
15	FizzBuzz
30	FizzBuzz



# LCD Number

Number	LCD
1	
2	┌┐ └└
3	┌┐ └└
13	┌┐ └└



# Vending Machine

## Vending Machine

Coin: TEN(10), Five(5), TWO(2), ONE(1)  
T F TW O

Item: Soft Drink(18): SD,  
Canned Coffee(12): CC,  
Drinking Water(7): DW

1. Buy SD(soft drink) with exact change  
Insert: T, F, TW, O  
Currently inserted money: 18  
Choose: Select SD  
Return: SD
2. Start adding change but hit coin return  
Insert: T, T, F  
Currently inserted money: 25  
Choose: Coin Return  
Return: T, T, F
3. Buy CC(canned coffee) without exact change  
Insert: T, T  
Currently inserted money: 20  
Choose: Select CC  
Return: CC, F, TW, O



# Test Coverage

```
go test -cover -coverprofile=c.out  
go tool cover -html=c.out
```