LAPORAN PRAKTIKUM

Algoritma Pemrograman

MODUL 12

While-loop

Disusun oleh:

Cofa Xavier Marvel

109082500001

S1IF-13-04

PROGRAM STUDI S1 INFORMATIKA

FAKULTAS INFORMATIKA

TELKOM UNIVERSITY PURWOKERTO

2025

L

1. **Guided 1**

Source Code

```go
package main

import (
    "fmt"
)

func main() {
    var n int
    fmt.Scan(&n)
    for n > 1 {
        fmt.Print(n, " x ")
        n--
    }
    fmt.Print(1)
}
```

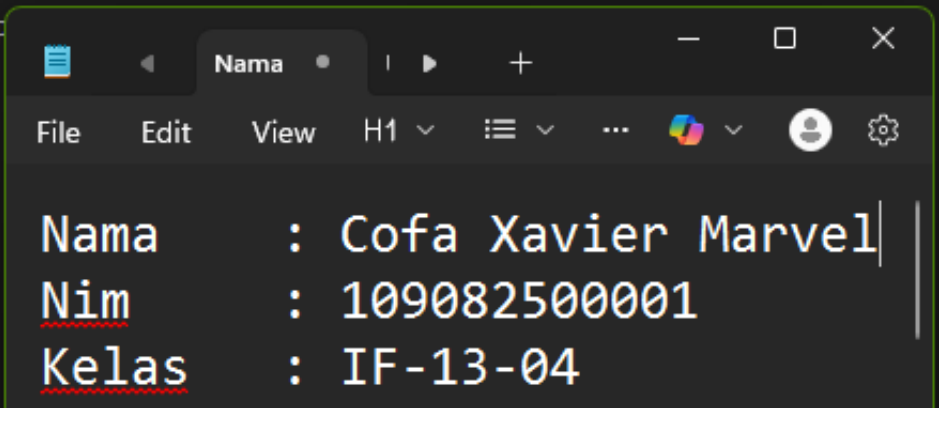
Screenshoot program

GoCode > Modul-12 > Guided-1.go > ...

```go
package main

import (
    "fmt"
)

func main() {
    var n int
    fmt.Scan(&n)
    for n > 1 {
        fmt.Print(n, " x ")
        n--
    }
    fmt.Print(1)
}

```

PROBLEMS 35 OUTPUT DEBUG CONSOLE TERMINAL TEST

```
PS C:\Code> go run "c:\Code\GoCode\Modul-12\Guide
12
12 x 11 x 10 x 9 x 8 x 7 x 6 x 5 x 4 x 3 x 2 x 1
PS C:\Code> go run "c:\Code\GoCode\Modul-12\Guide
5
5 x 4 x 3 x 2 x 1
PS C:\Code> go run "c:\Code\GoCode\Modul-12\Guide
0
1
PS C:\Code> go run "c:\Code\GoCode\Modul-12\Guide
1
1
```



Deskripsi program

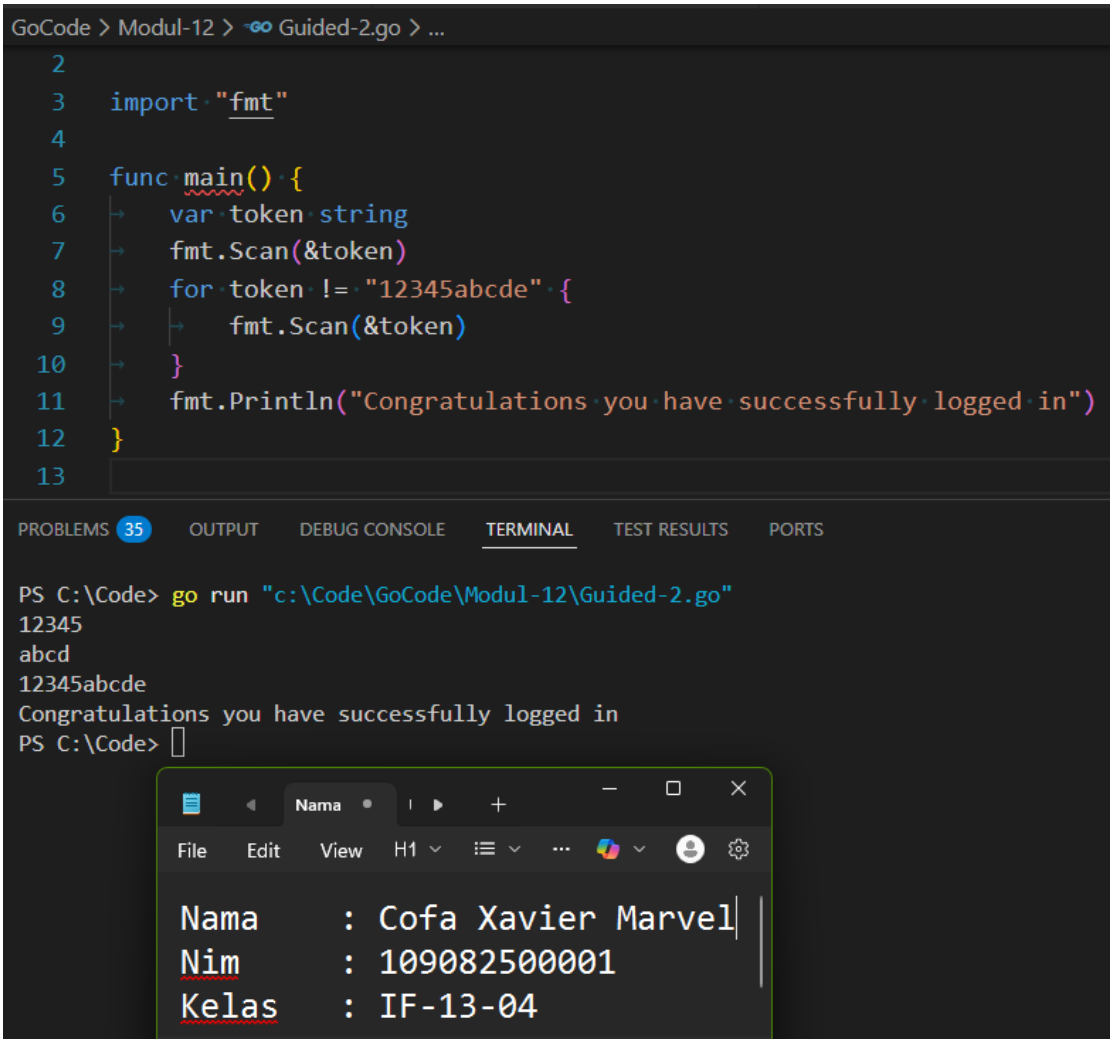
This program uses for like a while and while n is greater than 1 print n with x then n – 1 loop until n Is no longer greater than 1 then print 1

2. **Guided 2**

Source Code

```
package main

import "fmt"

func main() {
    var token string
    fmt.Scan(&token)
    for token != "12345abcde" {
        fmt.Scan(&token)
    }
    fmt.Println("Congratulations you have successfully logged in")
}
```

Screenshoot program



Deskripsi program

This program checks if token is not equal to the string “12345abcde” if it is equal then login is success

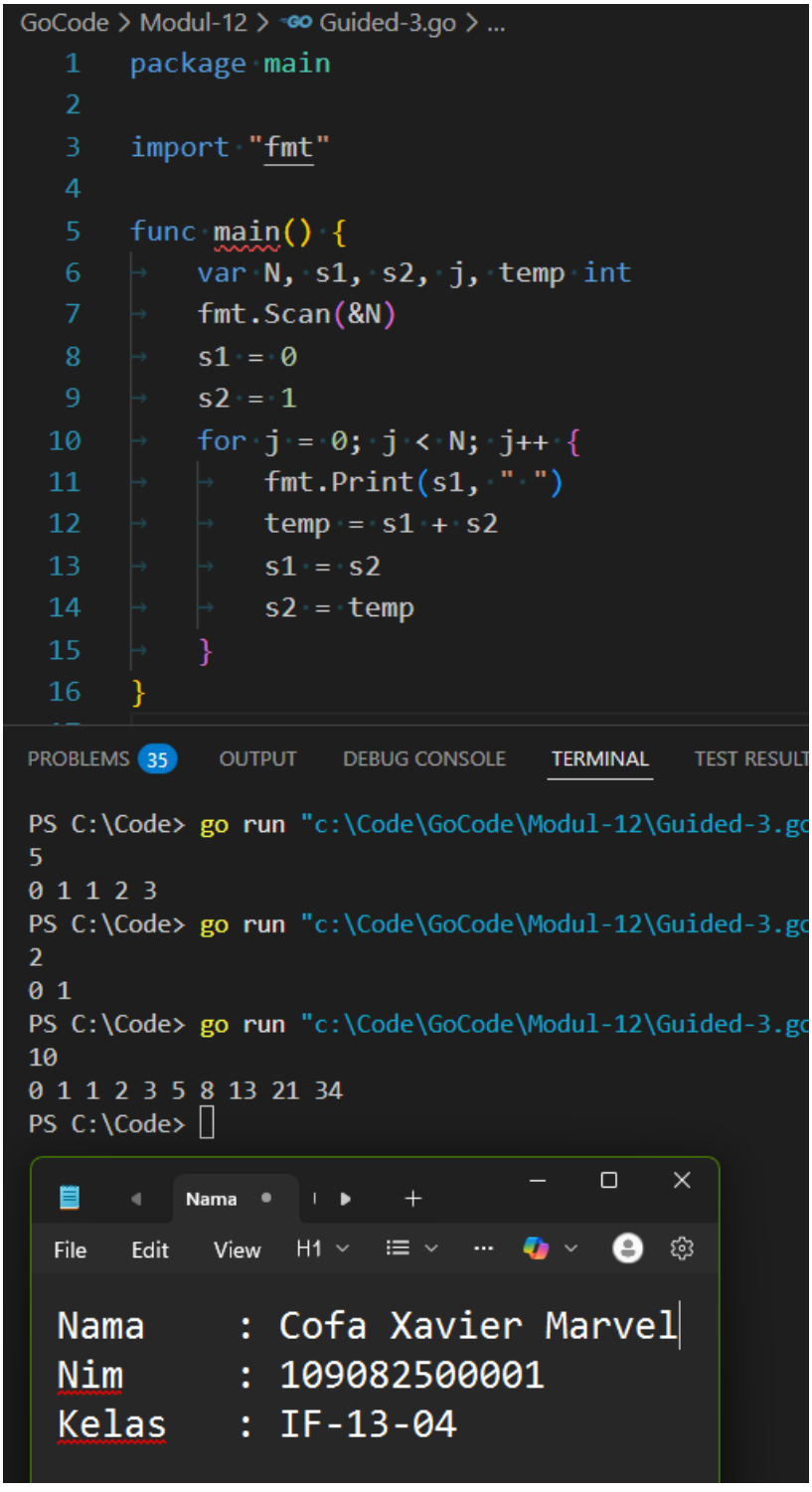
Guided 3

Source Code

```
package main

import "fmt"

func main() {
    var N, s1, s2, j, temp int
    fmt.Scan(&N)
    s1 = 0
    s2 = 1
    for j = 0; j < N; j++ {
        fmt.Print(s1, " ")
        temp = s1 + s2
```

```
        s1 = s2
        s2 = temp
    }
}
```

Screenshoot program



Deskripsi program

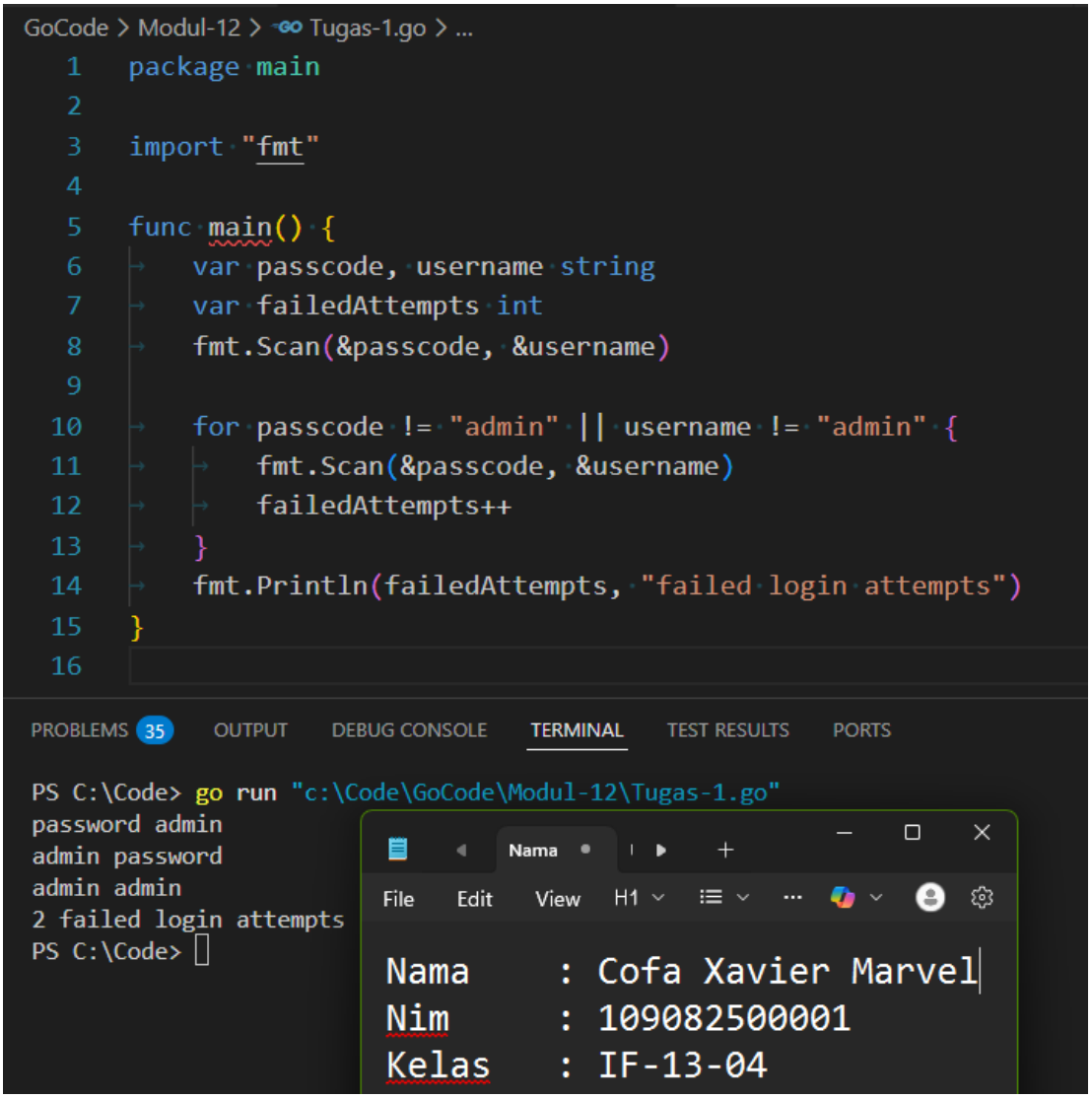
This program prints the first N numbers in the Fibonacci sequence.

Tugas 1

Source code

```go
package main

import "fmt"

func main() {
    var passcode, username string
    var failedAttempts int
    fmt.Scan(&passcode, &username)

    for passcode != "admin" || username != "admin" {
        fmt.Scan(&passcode, &username)
        failedAttempts++
    }
    fmt.Println(failedAttempts, "failed login attempts")
}
```

Screenshoot program



Deskripsi program

This program is used to count how many times a user fails to log in, due to a username and password error.

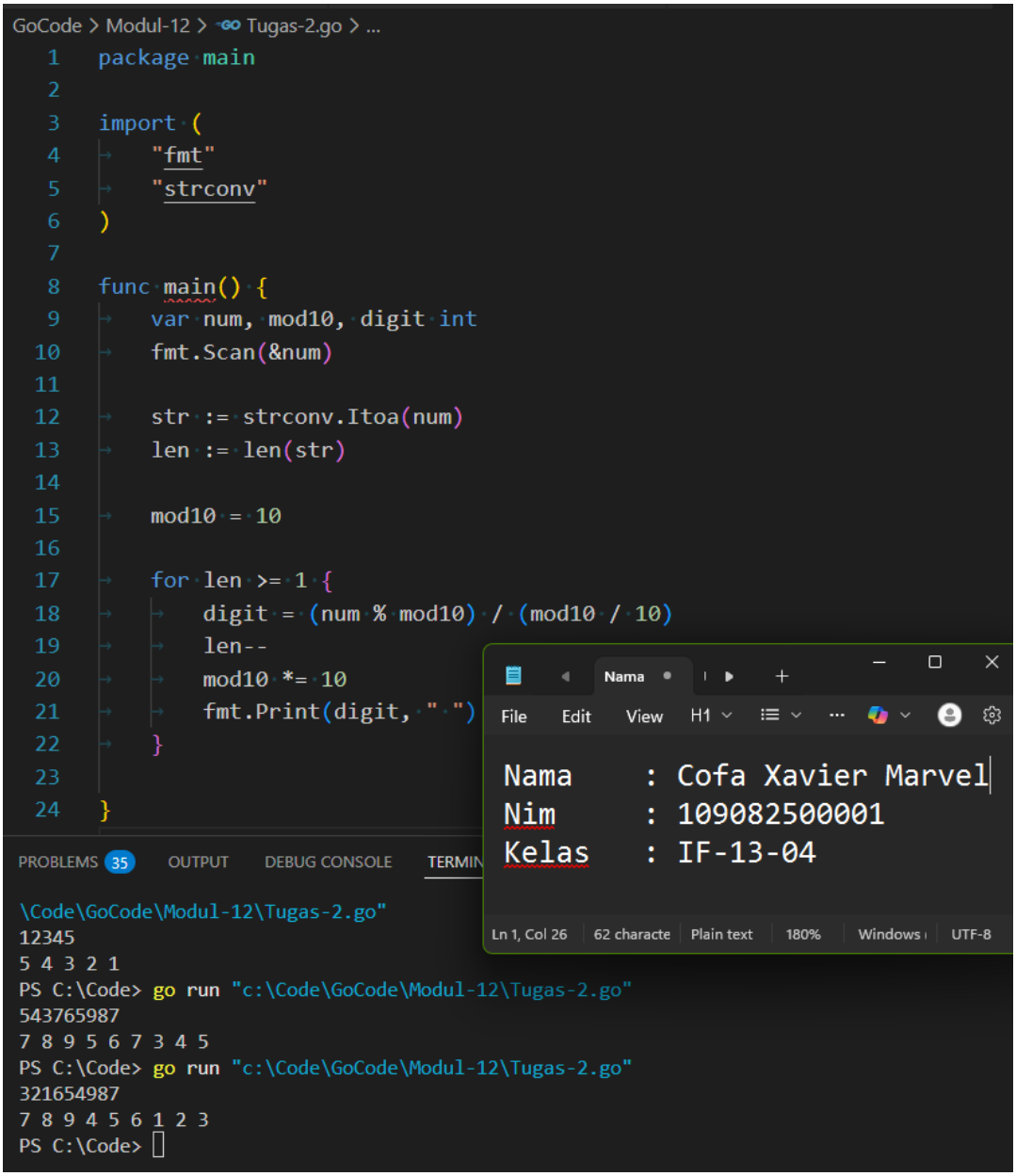
Tugas 2

Source code

```
package main

import (
    "fmt"
    "strconv"
)

func main() {
    var num, mod10, digit int
```

```
    fmt.Scan(&num)

    str := strconv.Itoa(num)
    len := len(str)

    mod10 = 10

    for len >= 1 {
        digit = (num % mod10) / (mod10 / 10)
        len--
        mod10 *= 10
        fmt.Print(digit, " ")
    }

}
```

Screenshoot program



Deskripsi program

This is a program that enumerates every digit contained in a positive integer. The input consists of a positive integer.

Tugas 3

Source code

```
package main

import "fmt"

func main() {
```

```
    var X, Y, Z int
    fmt.Scan(&X, &Y)

    for X >= Y {
        X = X - Y
        Z++
    }
    fmt.Println(Z)
}
```

Screenshoot program

GoCode > Modul-12 > Tugas-3.go > ...

```go
package main

import "fmt"

func main() {
    var X, Y, Z int
    fmt.Scan(&X, &Y)

    for X >= Y {
        X = X - Y
        Z++
    }
    fmt.Println(Z)
}
```

PROBLEMS 35 OUTPUT DEBUG CONSOLE TERMINAL TEST RESULTS

```
PS C:\Code> go run "c:\Code\GoCode\Modul-12\Tugas-3.go"
1234 1234
1
PS C:\Code> go run "c:\Code\GoCode\Modul-12\Tugas-3.go"
5 2
2
PS C:\Code> go run "c:\Code\GoCode\Modul-12\Tugas-3.go"
3600 120
30
PS C:\Code>
```

Nama

File Edit View H1

Nama : Cofa Xavier Marvel
Nim : 109082500001
Kelas : IF-13-04

Deskripsi program

The is a program to find the integer division result of two numbers. Use looping and no division operator