

LAPORAN PRAKTIKUM
Algoritma Pemrograman

MODUL 12
While-loop



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PROGRAM STUDI S1 INFORMATIKA
FAKULTAS INFORMATIKA
TELKOM UNIVERSITY PURWOKERTO
2025

L

1. Guided 1


Source Code

```
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 > ...

```
1 package main
2
3 import (
4     fmt
5 )
6
7 func main() {
8     var n int
9     fmt.Scan(&n)
10    for n > 1 {
11        fmt.Print(n, " x ")
12        n--
13    }
14    fmt.Print(1)
15 }
16
```

PROBLEMS **35** OUTPUT DEBUG CONSOLE TERMINAL TEST

PS C:\Code> go run "c:\Code\GoCode\Modul-12\Guided-1.go" 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\Guided-1.go" 5

5 x 4 x 3 x 2 x 1

PS C:\Code> go run "c:\Code\GoCode\Modul-12\Guided-1.go" 0

1

PS C:\Code> go run "c:\Code\GoCode\Modul-12\Guided-1.go" 1

1

1

1



Nama



File

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View

H1



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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

```
GoCode > Modul-12 > Guided-2.go > ...

2
3  import "fmt"
4
5  func main(){
6      var token string
7      fmt.Scan(&token)
8      for token != "12345abcde" {
9          fmt.Scan(&token)
10     }
11     fmt.Println("Congratulations you have successfully logged in")
12 }
13
```

PROBLEMS 35 OUTPUT DEBUG CONSOLE TERMINAL TEST RESULTS PORTS

```
PS C:\Code> go run "c:\Code\GoCode\Modul-12\Guided-2.go"
12345
abcd
12345abcde
Congratulations you have successfully logged in
PS C:\Code>
```

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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

```

GoCode > Modul-12 >  Guided-3.go > ...
1  package main
2
3  import "fmt"
4
5  func main(){
6      var N, s1, s2, j, temp int
7      fmt.Scan(&N)
8      s1 = 0
9      s2 = 1
10     for j = 0; j < N; j++{
11         fmt.Print(s1, ".")
12         temp = s1 + s2
13         s1 = s2
14         s2 = temp
15     }
16 }

```

PROBLEMS 35 OUTPUT DEBUG CONSOLE TERMINAL TEST RESULTS

```

PS C:\Code> go run "c:\Code\GoCode\Modul-12\Guided-3.go"
5
0 1 1 2 3
PS C:\Code> go run "c:\Code\GoCode\Modul-12\Guided-3.go"
2
0 1
PS C:\Code> go run "c:\Code\GoCode\Modul-12\Guided-3.go"
10
0 1 1 2 3 5 8 13 21 34
PS C:\Code>

```

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Deskripsi program

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

Tugas 1

Source code

```
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

```
GoCode > Modul-12 > Tugas-1.go > ...
1 package main
2
3 import "fmt"
4
5 func main(){
6     var passcode, username string
7     var failedAttempts int
8     fmt.Scan(&passcode, &username)
9
10    for passcode != "admin" || username != "admin" {
11        fmt.Scan(&passcode, &username)
12        failedAttempts++
13    }
14    fmt.Println(failedAttempts, "failed login attempts")
15 }
16
```

PROBLEMS 35 OUTPUT DEBUG CONSOLE TERMINAL TEST RESULTS PORTS

```
PS C:\Code> go run "c:\Code\GoCode\Modul-12\Tugas-1.go"
password admin
admin password
admin admin
2 failed login attempts
PS C:\Code>
```

Nama

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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

```
GoCode > Modul-12 > Tugas-2.go > ...
1 package main
2
3 import (
4     "fmt"
5     "strconv"
6 )
7
8 func main() {
9     var num, mod10, digit int
10    fmt.Scan(&num)
11
12    str := strconv.Itoa(num)
13    len := len(str)
14
15    mod10 = 10
16
17    for len >= 1 {
18        digit = (num % mod10) / (mod10 / 10)
19        len--
20        mod10 *= 10
21        fmt.Print(digit, " ")
22    }
23
24 }
```

PROBLEMS 35 OUTPUT DEBUG CONSOLE TERMINAL

\Code\GoCode\Modul-12\Tugas-2.go"

12345

5 4 3 2 1

PS C:\Code> go run "c:\Code\GoCode\Modul-12\Tugas-2.go"

543765987

7 8 9 5 6 7 3 4 5

PS C:\Code> go run "c:\Code\GoCode\Modul-12\Tugas-2.go"

321654987

7 8 9 4 5 6 1 2 3

PS C:\Code>

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Ln 1, Col 26 | 62 character | Plain text | 180% | Windows | UTF-8

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 > ...

```
1 package main
2
3 import "fmt"
4
5 func main() {
6     var X, Y, Z int
7     fmt.Scan(&X, &Y)
8
9     for X >= Y {
10         X = X - Y
11         Z++
12     }
13     fmt.Println(Z)
14 }
15
```

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>

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Deskripsi program

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