

LAPORAN PRAKTIKUM
Algoritma Pemrograman

MODUL 9

If-then



Disusun oleh:

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S1IF-13-04

PROGRAM STUDI S1 INFORMATIKA
FAKULTAS INFORMATIKA
TELKOM UNIVERSITY PURWOKERTO
2025

L

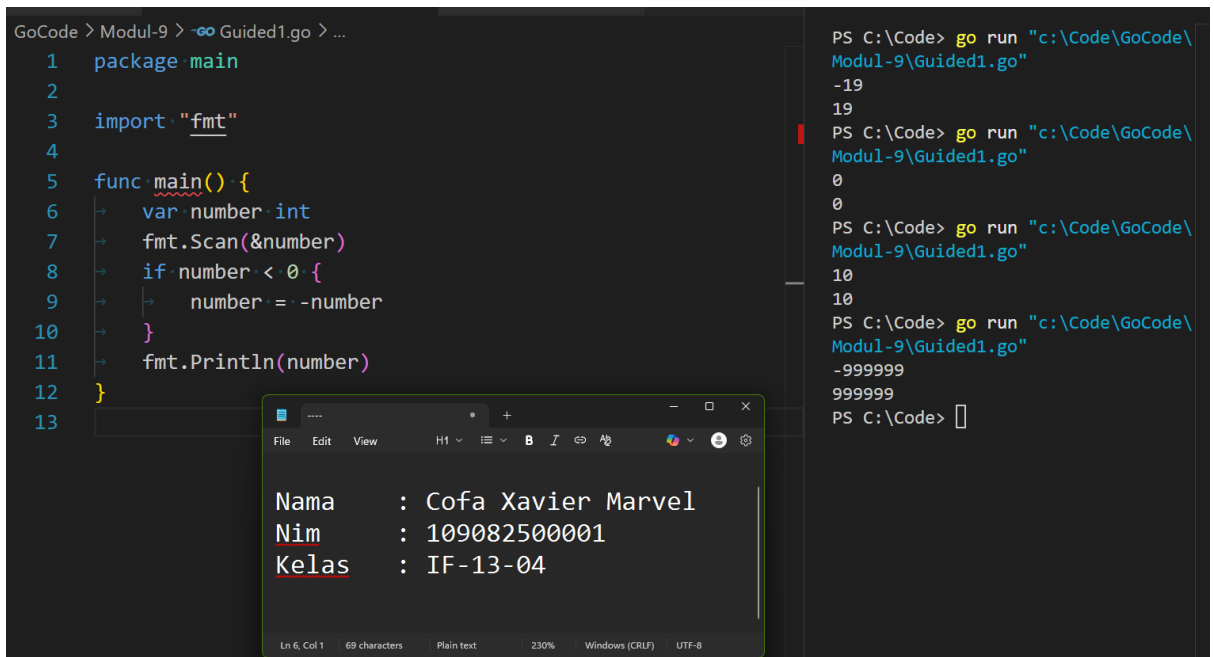
1. Guided 1 Source Code

```
package main

import "fmt"

func main() {
    var number int
    fmt.Scan(&number)
    if number < 0 {
        number = -number
    }
    fmt.Println(number)
}
```

Screenshoot program



```
GoCode > Modul-9 > -go Guided1.go > ...
1 package main
2
3 import "fmt"
4
5 func main() {
6     var number int
7     fmt.Scan(&number)
8     if number < 0 {
9         number = -number
10    }
11    fmt.Println(number)
12 }
13
```

```
PS C:\Code> go run "c:\Code\GoCode\Modul-9\Guided1.go"
-19
19
PS C:\Code> go run "c:\Code\GoCode\Modul-9\Guided1.go"
0
0
PS C:\Code> go run "c:\Code\GoCode\Modul-9\Guided1.go"
10
10
PS C:\Code> go run "c:\Code\GoCode\Modul-9\Guided1.go"
-999999
999999
PS C:\Code>
```

```
Nama : Cofa Xavier Marvel
Nim : 10908250001
Kelas : IF-13-04
```

Deskripsi program

This program uses an if then statement making it so if the variable number is below zero then the number is negated in turn becoming a positive number, if the number is not below zero then it does nothing but print the number again.

2. Guided 2

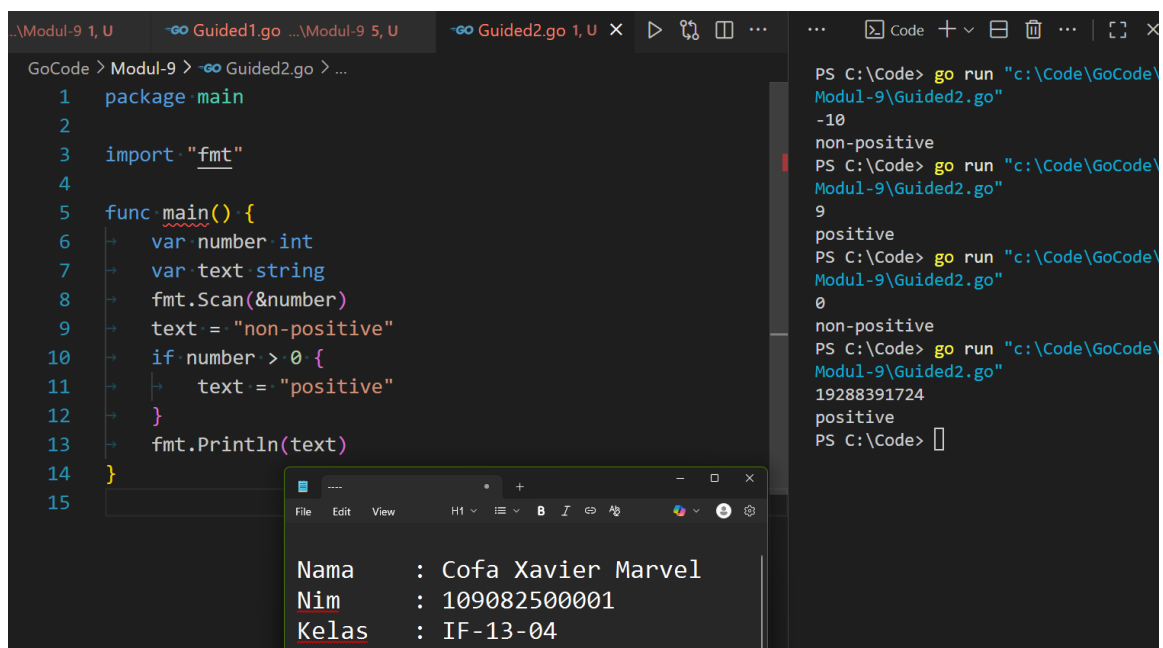
Source Code

```
package main

import "fmt"

func main() {
    var number int
    var text string
    fmt.Scan(&number)
    text = "non-positive"
    if number > 0 {
        text = "positive"
    }
    fmt.Println(text)
}
```

Screenshoot program



```
GoCode > Modul-9 > -go Guided2.go > ...
1 package main
2
3 import "fmt"
4
5 func main() {
6     var number int
7     var text string
8     fmt.Scan(&number)
9     text = "non-positive"
10    if number > 0 {
11        text = "positive"
12    }
13    fmt.Println(text)
14 }
15
```

```
PS C:\Code> go run "c:\Code\GoCode\Modul-9\Guided2.go"
-10
non-positive
PS C:\Code> go run "c:\Code\GoCode\Modul-9\Guided2.go"
9
positive
PS C:\Code> go run "c:\Code\GoCode\Modul-9\Guided2.go"
19288391724
positive
PS C:\Code>
```

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

Deskripsi program

This program decides whether or not a number is positive using an if statement And prints the variable text that is changed when the if statement is triggered.

3. Guided 3

Source Code

```
package main

import "fmt"
```

```
func main() {
    var number int
    var result bool
    fmt.Scan(&number)
    result = number%2 == 0 && number < 0
    fmt.Println(result)
}
```

Screenshoot program

```
GoCode > Modul-9 > -go Guided3.go > ...
1 package main
2
3 import "fmt"
4
5 func main() {
6     var number int
7     var result bool
8     fmt.Scan(&number)
9     result = number%2 == 0 && number < 0
10    fmt.Println(result)
11 }
12
```

```
PS C:\Code> go run "c:\Code\GoCode\Modul-9\Guided3.go"
-10
true
PS C:\Code> go run "c:\Code\GoCode\Modul-9\Guided3.go"
90
false
PS C:\Code> go run "c:\Code\GoCode\Modul-9\Guided3.go"
-3
false
PS C:\Code> go run "c:\Code\GoCode\Modul-9\Guided3.go"
-90
true
PS C:\Code>
```

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

Deskripsi program

This program find whether it is true or false that a number is both even and an negative.

TUGAS

Tugas 1

Source code

```
package main

import "fmt"

func main() {
    var bikes, persons int
    fmt.Scan(&persons)
    bikes = (persons / 2) + (persons % 2)
    fmt.Print(bikes)
}
```

```
}
```

Screenshoot program

The screenshot shows a Go program in a code editor and its execution output in a terminal. The program calculates the number of motorbikes needed to transport a given number of people. The output shows the program running successfully and displaying the calculated number of bikes.

```
GoCode > Modul-9 > Tugas1.go > main
1 package main
2
3 import "fmt"
4
5 func main() {
6     var bikes, persons int
7
8     fmt.Scan(&persons)
9     bikes = (persons / 2) + (persons % 2)
10    fmt.Print(bikes)
11 }
12
```

```
PS C:\Code> go run "c:\Code\GoCode\Modul-9\Tugas1.go"
25
PS C:\Code> go run "c:\Code\GoCode\Modul-9\Tugas1.go"
10
PS C:\Code> go run "c:\Code\GoCode\Modul-9\Tugas1.go"
5
PS C:\Code> go run "c:\Code\GoCode\Modul-9\Tugas1.go"
1
PS C:\Code>
```

Output window content:

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

Deskripsi program

This program calculates the amount of motorbikes needed to transport a given number of people, it does this by summing the divide number of people with the modulo of people.

Tugas 2

Source code

```
package main

import "fmt"

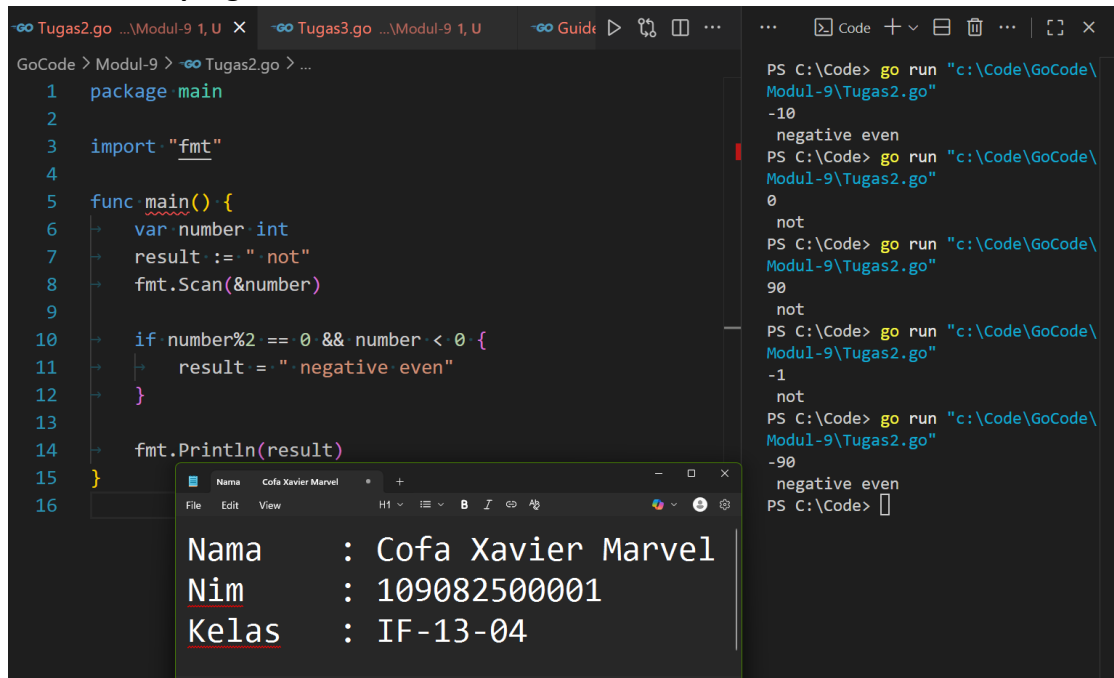
func main() {
    var number int
    result := " not"
    fmt.Scan(&number)

    if number%2 == 0 && number < 0 {
        result = " negative even"
    }

    fmt.Println(result)
}
```

```
}
```

Screenshoot program



```
GoCode > Modul-9 > -go Tugas2.go > ...
1 package main
2
3 import "fmt"
4
5 func main() {
6     var number int
7     result := "not"
8     fmt.Scan(&number)
9
10    if number%2 == 0 && number < 0 {
11        result = "negative even"
12    }
13
14    fmt.Println(result)
15 }
16
```

```
PS C:\Code> go run "c:\Code\GoCode\Modul-9\Tugas2.go"
-10
negative even
PS C:\Code> go run "c:\Code\GoCode\Modul-9\Tugas2.go"
0
not
PS C:\Code> go run "c:\Code\GoCode\Modul-9\Tugas2.go"
90
not
PS C:\Code> go run "c:\Code\GoCode\Modul-9\Tugas2.go"
-1
not
PS C:\Code> go run "c:\Code\GoCode\Modul-9\Tugas2.go"
-90
negative even
PS C:\Code>
```

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

Deskripsi program

This program does the same as the program in Guided 3, but instead of a bool it outputs a variable result string, by default it is "not", when the number is negative and even the string is changed to "negative even".

Tugas 3

Source code

```
package main

import "fmt"

func main() {
    var num1, num2 int
    var bol1, bol2 bool

    fmt.Scan(&num1, &num2)

    bol1 = num2%num1 == 0
    bol2 = num1%num2 == 0
}
```

```

    fmt.Print(bol1, bol2)
}

```

Screenshoot program

The screenshot shows a Go program in VS Code and its execution output in a terminal window.

Go Code (Tugas3.go):

```

1 package main
2
3 import "fmt"
4
5 func main() {
6     var num1, num2 int
7     var bol1, bol2 bool
8
9     fmt.Scan(&num1, &num2)
10
11     bol1 = num2%num1 == 0
12     bol2 = num1%num2 == 0
13
14     fmt.Print(bol1, bol2)
15 }
16

```

Terminal Output:

```

PS C:\Code> go run "c:\Code\GoCode\Modul-9\Tugas3.go"
10 5
false true
PS C:\Code> go run "c:\Code\GoCode\Modul-9\Tugas3.go"
3 21
true false
PS C:\Code> go run "c:\Code\GoCode\Modul-9\Tugas3.go"
4 4
true true
PS C:\Code>

```

Output Window (Nama Cofa Xavier Marvel):

```

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

```

Deskripsi program

This program finds the truth value of bol1 by getting the leftover division of num2 and num1 then seeing if it is equal to zero it does the invers with bol2.