

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

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)
}
```

Screenshot program

The screenshot shows a code editor with the following code:

```
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 }
```

Below the code editor is a terminal window showing the execution of the program:

```
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>
```

A modal dialog box is overlaid on the code editor, displaying student information:

Nama	:	Cofa Xavier Marvel
Nim	:	109082500001
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)
}
```

Screenshot program

```
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"
0
non-positive
PS C:\Code> go run "c:\Code\GoCode\Modul-9\Guided2.go"
19288391724
positive
PS C:\Code>
```

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)
}

```

Screenshot program

The screenshot shows a terminal window with two panes. The left pane displays the source code for a Go program named Guided3.go. The right pane shows the command-line interface where the program is run with different inputs to demonstrate its logic.

```

GoCode > Modul-9 > -> 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>

```

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)
}

```



Screenshot program

The screenshot shows a terminal window with the following text:

```
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.Println(bikes)
11 }
12
```

PS C:\Code> go run "c:\Code\GoCode\Modul-9\Tugas1.go"
25
13
PS C:\Code> go run "c:\Code\GoCode\Modul-9\Tugas1.go"
10
5
PS C:\Code> go run "c:\Code\GoCode\Modul-9\Tugas1.go"
9
5
PS C:\Code> go run "c:\Code\GoCode\Modul-9\Tugas1.go"
1
1
PS C:\Code>

A separate window titled "Nama" displays the following information:

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)
```



Screenshot program

A screenshot of a GoCode IDE. The code editor shows a file named Tugas2.go with the following content:

```
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
```

A terminal window to the right shows the command `go run "c:\Code\GoCode\Modul-9\Tugas2.go"` being run multiple times with different inputs (-10, 0, -90, -1) and the resulting output ("negative even" or "not"). A small window in the foreground displays student information: 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.Println(bol1, bol2)
}
```

Screenshot program

The screenshot shows a terminal window with the command `go run "c:\Code\GoCode\Modul-9\Tugas3.go"` and its 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>
```

Below the terminal is a code editor window showing `Tugas3.go` with the following code:

```
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.Println(bol1, bol2)
15 }
16
```

At the bottom is a text editor window titled "Nama" showing the following text:

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`.