

LAPORAN PRAKTIKUM ALGORITMA

DAN PEMROGRAMAN 1

MODUL No.13

REPEAT UNTIL



Disusun oleh:

Ismail Marasabessy

S1IF-13-07

Asisten Praktikum

Adithana dharma putra

Apri pandu wicaksono

PROGRAM STUDI S1 INFORMATIKA

FAKULTAS INFORMATIKA

TELKOM UNIVERSITY PURWOKERTO

2025

LATIHAN KELAS – GUIDED

1. Guided 1 Source Code

```
package main

import
"fmt"

func main() {
var kata string
var jumlah int

    fmt.Println("Masukkan kata: ")

    fmt.Scan(&kata)        fmt.Println("Masukkan jumlah
pengulangan: ")        fmt.Scan(&jumlah)

    counter := 0        for {
        fmt.Println(kata)
        counter++        if counter
        >= jumlah {            break
            }
    }
    fmt.Println("Selesai.")
}
```

Screenshot program

The screenshot shows a Visual Studio Code interface with the following details:

- EXPLORER:** Shows a file tree for "ALPRO WEEK13" containing files like "guided1.go", "guided2.go", "guided3.go", "soal1.go", "soal2.go", "soal3.go".
- EDITOR:** The "guided1.go" file is open, displaying the following Go code:

```
1 package main
2
3 import "fmt"
4
5 func main() {
6     var word string
7     var repetitions int
8     fmt.Scan(&word, &repetitions)
9     counter := 0
10    for done := false; !done; {
11        fmt.Println(word)
12        counter++
13        done = (counter >= repetitions)
14    }
15}
16
```
- TERMINAL:** Shows the command "go run "c:\Users\acer\Desktop\Alpro week13\guided1.go"" being run, with output "pagi", "3", "pagi", "pagi", "pagi".
- CHAT:** An AI chat window titled "ismail marasabessy" with the message "109082500113".
- SUGGESTED ACTIONS:** A panel with the text "Describe what to build next" and "Agent" and "Pick Model" buttons.

Deskripsi program

Penjelasan singkat: program meminta sebuah kata dan angka. Kemudian menjalankan blok for { ... } yang selalu dieksekusi (berperan sebagai repeat) dan setelah setiap cetak mengecek apakah jumlah cetakan sudah mencapai angka yang diminta; jika ya, break menghentikan loop—berfungsi seperti until.

2. Guided 2 Source

Code

```
package main

import (
    "fmt"
)

func main() {
    var n int

    for {
        fmt.Println("Masukkan bilangan bulat positif: ")
        fmt.Scan(&n)

        if n > 0 {
            break
        }
    }

    fmt.Println(n, "adalah bilangan bulat positif")
}
```

Screenshot program

The screenshot shows a Microsoft Visual Studio Code (VS Code) interface. The Explorer sidebar on the left lists files in a folder named 'ALPRO WEEK13', including 'guided1.go', 'guided1.go', 'guided2.go' (which is selected), 'guided3.go', 'soal1.go', 'soal2.go', and 'soal3.go'. The main editor area displays a Go program named 'guided2.go' with the following code:

```
1 package main
2
3 import "fmt"
4
5 func main() {
6     var number int
7     var continueLoop bool
8     for continueLoop = true; continueLoop; {
9         fmt.Scan(&number)
10        continueLoop = number <= 0
11    }
12    fmt.Printf("%d adalah bilangan bulat positif\n", number)
13 }
```

Below the editor is a terminal window titled 'ismail mar' showing the command 'go run .'. The user has entered several numbers: -5, -2, -1, 0, and 5. The terminal output indicates that only the last input, 5, is recognized as a positive integer.

Deskripsi program

Program ini meminta untuk memasukkan bilangan bulat positif. Jika pengguna memasukkan bilangan negatif atau nol, program akan mengulang terus sampai pengguna memasukkan bilangan yang benar (positif).

Guided 3 Source Code

```
package main

import (
    "fmt"
)

func main() {
    var x, y
    int
    fmt.Println("Masukkan X:")
    fmt.Scan(&x)
    fmt.Println("Masukkan Y: ")
    fmt.Scan(&y)
    temp := x
    for {
        temp = temp - y
        if temp <= 0 {
            break
        }
    }
    if temp == 0 {
        fmt.Println("true")
    } else {
        fmt.Println("false")
    }
}
```

Screenshot program

The screenshot shows a Windows desktop environment with a Visual Studio Code (VS Code) window open. The code editor displays a Go file named `guided3.go` with the following content:

```
1 package main
2
3 import (
4     "fmt"
5 )
6
7 func main() {
8     var x, y int
9
10    fmt.Print("Masukkan X: ")
11    fmt.Scan(&x)
12    fmt.Print("Masukkan Y: ")
13    fmt.Scan(&y)
14
15    temp := x
16
17    for {
18        temp = temp - y
19        fmt.Println(temp)
20    }
21}
```

The terminal window below shows the execution of the program:

```
PS C:\Users\acer\Desktop\Alpro week13> go run "c:\Users\acer\Desktop\Alpro week13\guided3.go"
Masukkan X: 2
Masukkan Y: 3
-1
false
PS C:\Users\acer\Desktop\Alpro week13>
```

A floating window titled "Build with Agent" is visible, containing the text "ismail marasabessy" and "109082500113". The status bar at the bottom right shows the date and time as "12/14/2025 3:09 PM".

Deskripsi program

Program ini memakai for {} sebagai repeat dan break sebagai until. X dikurangi Y terus menerus dan setiap hasilnya dicetak. Pengulangan berhenti saat hasilnya ≤ 0 . Jika hasil akhirnya tepat 0 berarti X kelipatan Y (true), jika negatif berarti bukan kelipatan (false).

TUGAS

1. Tugas 1 Source code

```
package main

import
"fmt"

func main() {    var n int
fmt.Print("Masukkan bilangan: ")
fmt.Scan(&n)

hitung :=

0

for {

hitung++        n
= n / 10        if
n == 0 {
break

}        }        fmt.Println("Jumlah
digit:", hitung)
}
```

Screenshot program

The screenshot shows the VS Code interface with the following details:

- Explorer View:** Shows a file tree for "ALPRO WEEK13" containing "guided1", "guided2", "guided3", "soal1", "soal2", "soal3", and "soal1.go".
- Code Editor:** Displays the content of "soal1.go".

```
1 package main
2
3 import "fmt"
4
5 func main() {
6     var n int
7     fmt.Print("Masukkan bilangan: ")
8     fmt.Scan(&n)
9
10    hitung := 0
11
12    for {
13        hitung++
14        n = n / 10
15        if n == 0 {
16            break
17        }
18    }
19    fmt.Println("Jumlah digit:", hitung)
```
- Terminal:** Shows the command "go run" being run in the terminal, followed by user input and the program's output.

```
PS C:\Users\acer\Desktop\Alpro week13> go run "c:\Users\acer\Desktop\Alpro week13\soal1\soal1.go"
Masukkan bilangan: 5
Jumlah digit: 1
PS C:\Users\acer\Desktop\Alpro week13> go run "c:\Users\acer\Desktop\Alpro week13\soal1\soal1.go"
Masukkan bilangan: 234
Jumlah digit: 3
PS C:\Users\acer\Desktop\Alpro week13>
```
- Chat Panel:** Shows a message from "ismail marasabessy" with the text "109082500113".
- Suggested Actions:** A panel on the right suggests "Build Workspace" and "Show Config".

Deskripsi program

Setiap putaran, angka dibagi 10 untuk membuang digit paling belakang, sambil menghitung berapa kali proses berlangsung. Saat angkanya menjadi 0, loop berhenti dan jumlah digit ditampilkan.

2. Tugas 2

Source code

```
package main

import
"fmt"

func main() {      var x float64
fmt.Print("Masukkan bilangan desimal: ")
fmt.Scan(&x)

batas :=
math.Ceil(x)      curr :=
x

for {            curr += 0.1
fmt.Printf("%.1f\n", curr)
if curr >= batas
{
break
}
}

}
```

Screenshot program

The screenshot shows a Microsoft Visual Studio Code (VS Code) window. The left sidebar has a tree view titled 'EXPLORER' showing a project structure under 'ALPRO WEEK13'. The 'soal2.go' file is selected. The main area is a code editor with the following Go code:

```
1 package main
2
3 import (
4     "fmt"
5     "math"
6 )
7
8 func main() {
9     var x float64
10    fmt.Print("Masukkan bilangan desimal: ")
11    fmt.Scan(&x)
12
13    batas := math.Ceil(x)
14    curr := x
15
16    for {
17        curr += 0.1
18        fmt.Printf("%.1f\n", curr)
19    }
}
```

The terminal at the bottom shows the output of running the program:

```
PS C:\Users\acer\Desktop\Alpro week13> go run "c:\Users\acer\Desktop\Alpro week13\soal2\soal2.go"
Masukkan bilangan desimal: 2.7
2.8
2.9
3.0
PS C:\Users\acer\Desktop\Alpro week13>
```

A floating 'Build with Agent' panel is visible on the right, showing AI responses and suggestions.

Deskripsi program

Program ini menghitung nilai dari bilangan awal dan menambahkan 0.1 setiap perulangan.

Tugas 3

Source code

```
package
main

import "fmt"
func main() {
var target int
    fmt.Print("Masukkan target donasi: ")
fmt.Scan(&target)
    total := 0
donatur := 1
    for
{
    var donasi int
fmt.Scan(&donasi)

    total += donasi
    fmt.Printf("Donatur %d : Menyumbang %d. Total
terkumpul: %d\n",
                donatur, donasi, total)

    donatur++

    if total >= target {
break
}
}
    fmt.Printf("Target tercapai! Total donasi: %d dari
%d donatur.\n",
                total, donatur-1)
}
```

Screenshot program

The screenshot shows the VS Code interface with the following details:

- EXPLORER** sidebar: Shows a project structure under "ALPRO WEEK13" containing files: guided1.go, guided2.go, guided3.go, soal1.go, soal2.go, and soal3.go.
- CODE EDITOR**: The active tab is "soal3.go". The code is as follows:

```
1 package main
2
3 import "fmt"
4
5 func main() {
6     var target int
7     fmt.Println("Masukkan target donasi:")
8     fmt.Scan(&target)
9
10    total := 0
11
12    for {
13        var donasi int
14        fmt.Scan(&donasi)
15
16        total += donasi
17        fmt.Printf("Donatur %d : Menyumbang %d. Total terkumpul: %d\n",
18                  donatur, donasi, total)
19    }
}
```

- TERMINAL**: Shows the command "go run "c:\Users\acer\Desktop\Alpro week13\soal3.go"" being run, followed by the output of the program which asks for a target donation of 300 and then loops through three donors contributing 100, 50, and 200 respectively, reaching a total of 350.
- CHAT**: A sidebar on the right titled "Build with Agent" provides AI integration options.
- SUGGESTED ACTIONS**: Offers actions like "Build Workspace" and "Show Config".

Deskripsi program

Setiap donatur memasukkan jumlah donasi, total donasi ditambah, dan ditampilkan. Saat total donasi mencapai atau melebihi target, kondisi until terpenuhi dan loop dihentikan dengan break.