

LAPORAN PRA KTIKUM

Algoritma Pemrograman

MODUL

IF- ELSE



Disusun oleh:

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PROGRAM STUDI S1 INFORMATIKA

FAKULTAS INFORMATIKA

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LATIHAN KELAS – GUIDED

1. Guided 1

Source Code

```
package main

import "fmt"

func main() {
    var usia int
    var kk bool
    fmt.Scan(&usia, &kk)
    if usia >= 17 && kk {
        fmt.Println("bisa membuat KTP")
    } else {
        fmt.Println("belum bisa membuat KTP")
    }
}
```

Screenshot program

The screenshot shows a Go code editor interface. The code in the main.go file is as follows:

```
package main
import "fmt"
func main() {
    var usia int
    var kk bool
    fmt.Scan(&usia, &kk)
    if usia >= 17 && kk {
        fmt.Println("bisa membuat KTP")
    } else {
        fmt.Println("belum bisa membuat KTP")
    }
}
```

The terminal window shows the output of running the program with two different inputs:

```
PS C:\Users\tetuk\OneDrive\文档\laprak mod 10> go run "c:\Users\tetuk\OneDrive\文档\laprak mod 10\guided1.go"
17
true
bisa membuat KTP
PS C:\Users\tetuk\OneDrive\文档\laprak mod 10> go run "c:\Users\tetuk\OneDrive\文档\laprak mod 10\guided1.go"
20
false
belum bisa membuat KTP
PS C:\Users\tetuk\OneDrive\文档\laprak mod 10> go run "c:\Users\tetuk\OneDrive\文档\laprak mod 10\guided1.go"
15
true
belum bisa membuat KTP
PS C:\Users\tetuk\OneDrive\文档\laprak mod 10>
```

Deskripsi program

Program diatas untuk menentukan apakah seorang penduduk bisa membuat KTP atau tidak. Syarat utama membuat KTP adalah berusia minimal 17 tahun dan memiliki kartu keluarga.

2. Guided 2

Source Code

```
package main

import "fmt"

func main() {
    var x rune
    var huruf, vKecil, vBesar bool
    fmt.Scanf("%c", &x)
    huruf = (x >= 'a' && x <= 'z') || (x >= 'A' && x <= 'Z')
    vKecil = x == 'a' || x == 'i' || x == 'u' || x == 'e' || x == 'o'
    vBesar = x == 'A' || x == 'I' || x == 'U' || x == 'E' || x == 'O'
    if huruf && (vKecil || vBesar) {
        fmt.Println("vokal")
    } else if huruf && !(vKecil || vBesar) {
        fmt.Println("konsonan")
    } else {
        fmt.Println("bukan huruf")
    }
}
```

Screenshot program

The screenshot shows a Go code editor interface with the following details:

- File Explorer:** Shows files in the "LAPRAK MOD 10" folder: "guided1.go" and "guided2.go".
- Code Editor:** Displays the content of "guided2.go".

```
func main() {
    var x rune
    fmt.Scanf("%c", &x)
    huruf = (x >= 'a' && x <= 'z') || (x >= 'A' && x <= 'Z')
    vKecil = x == 'a' || x == 'i' || x == 'u' || x == 'e' || x == 'o'
    vBesar = x == 'A' || x == 'I' || x == 'U' || x == 'E' || x == 'O'
    if huruf && (vKecil || vBesar) {
        fmt.Println("vokal")
    } else if huruf && !(vKecil || vBesar) {
        fmt.Println("konsonan")
    } else {
        fmt.Println("bukan huruf")
    }
}
```
- Terminal:** Shows the command "go run" being run on "guided2.go" and the output:

```
PS C:\Users\tetuk\OneDrive\Documents\laprak mod 10> go run "c:\Users\tetuk\OneDrive\Documents\laprak mod 10\guided2.go"
A
vokal
PS C:\Users\tetuk\OneDrive\Documents\laprak mod 10> go run "c:\Users\tetuk\OneDrive\Documents\laprak mod 10\guided2.go"
f
konsonan
PS C:\Users\tetuk\OneDrive\Documents\laprak mod 10> go run "c:\Users\tetuk\OneDrive\Documents\laprak mod 10\guided2.go"
i
bukan huruf
PS C:\Users\tetuk\OneDrive\Documents\laprak mod 10> go run "c:\Users\tetuk\OneDrive\Documents\laprak mod 10\guided2.go"
$
bukan huruf
PS C:\Users\tetuk\OneDrive\Documents\laprak mod 10> []
```
- Output:** Shows the output of the program:

```
name:muhhammad tetuko Kemal pasha
nim :109082560181
kelas:S1-IF13-04
```
- Chat:** A floating window titled "Ask about your code" with the message "AI responses may be inaccurate." It also has a "Generate Agent Instructions to onboard AI base." button.

Deskripsi program

Program diatas untuk menentukan huruf vocal atau konsonan

3. Guided

Source Code

```
package main

import "fmt"

func main() {
    var bilangan, d1, d2, d3, d4 int
    var teks string
    fmt.Println("Bilangan: ")
    fmt.Scan(&bilangan)
    d4 = bilangan % 10
    d3 = (bilangan % 100) / 10
    d2 = (bilangan % 1000) / 10
    d1 = bilangan / 1000
    if d1 < d2 && d2 < d3 && d3 < d4 {
        teks = "terurut membesar"
    } else if d1 > d2 && d2 > d3 && d3 > d4 {
        teks = "terurut mengecil"
    } else {
        teks = "tidak terurut"
    }
    fmt.Println("Digit pada bilangan", bilangan, teks)
}
```

Screenshot program

The screenshot shows a code editor interface with several tabs open. The active tab is 'guided3.go' which contains the following Go code:

```
package main
import "fmt"
func main() {
    var bilangan, d1, d2, d3, d4 int
    var teks string
    fmt.Println("Bilangan: ")
    fmt.Scan(&bilangan)
    d1 = bilangan % 10
    d3 = (bilangan % 100) / 10
    d2 = (bilangan % 1000) / 100
    d4 = bilangan / 1000
    if d1 < d2 && d2 < d3 && d3 < d4 {
        teks = "terurut membesar"
    } else if d1 > d2 && d2 > d3 && d3 > d4 {
        teks = "terurut mengecil"
    } else {
        teks = "tidak terurut"
    }
    fmt.Println("Digit pada bilangan", bilangan, teks)
}
```

The terminal window below shows the execution of the program with two different inputs:

```
PS C:\Users\tetuk\OneDrive\文檔\laprak mod 10> go run "c:\Users\tetuk\OneDrive\文檔\laprak mod 10\guided3.go"
Bilangan: 2489
Digit pada bilangan 2489 tidak terurut
PS C:\Users\tetuk\OneDrive\文檔\laprak mod 10> go run "c:\Users\tetuk\OneDrive\文檔\laprak mod 10\guided3.go"
Bilangan: 3861
Digit pada bilangan 3861 tidak terurut
PS C:\Users\tetuk\OneDrive\文檔\laprak mod 10> go run "c:\Users\tetuk\OneDrive\文檔\laprak mod 10\guided3.go"
Bilangan: 9651
Digit pada bilangan 9651 tidak terurut
PS C:\Users\tetuk\OneDrive\文檔\laprak mod 10> []
```

A small AI interface is visible on the right side of the screen.

Deskripsi program

Program diatas mengurutkan bilangan dari yang terkecil menjadi terbesar

1. soal 1

Source code

```
package main

import "fmt"

func main() {
    var parsel int
    var kgParsel int
    var total int
    var sisa int
    fmt.Scan(&parsel)
    kgParsel = parsel / 1000
    sisa = parsel % 1000
    if kgParsel > 0 {
        total += kgParsel * 10000
        if kgParsel < 10 {
            if sisa >= 500 {
                total += sisa * 5
            } else if sisa < 500 {
                total += sisa * 15
            }
        }
    }
    fmt.Println(total)
}
```

Screenshot program

The screenshot shows a Go code editor interface with the following details:

- File Explorer:** Shows files in the 'LAPRAK MOD 10' folder: 'guided1.go', 'guided2.go', 'guided3.go', 'soal1.go', 'soal2.go', and 'soal3.go'. 'soal1.go' is currently selected.
- Code Editor:** Displays the content of 'soal1.go'. The code defines a package 'main' with a function 'main()' that reads an integer from standard input, calculates a total based on the input value, and prints the total.
- Terminal:** Shows the command-line output of running 'soal1.go'. The user runs 'go run "c:\Users\tetuk\OneDrive\文檔\laprak mod 10\soal1.go"' and the program outputs:

```
PS C:\Users\tetuk\OneDrive\文檔\laprak mod 10> go run "c:\Users\tetuk\OneDrive\文檔\laprak mod 10\soal1.go"
8500
82500
9250
93750
11750
110000
PS C:\Users\tetuk\OneDrive\文檔\laprak mod 10> go run "c:\Users\tetuk\OneDrive\文檔\laprak mod 10\soal1.go"
11750
110000
PS C:\Users\tetuk\OneDrive\文檔\laprak mod 10> []
```
- Output Panel:** Shows the output of the terminal command.
- Bottom Status Bar:** Includes system icons like battery level, signal strength, and date/time (11/23/2025, 6:26 PM).

Deskripsi program

Program diatas menjelaskan tentang biaya pengiriman

2. soal 2

Source code

```
package main

import "fmt"

func main() {
    var nam float64
    var nmk string
    fmt.Println("Nilai akhir mata kuliah: ")
    fmt.Scan(&nam)
    if nam > 80 {
        nmk = "A"
    } else if nam > 72.5 {
        nmk = "AB"
    } else if nam > 65 {
        nmk = "B"
    } else if nam > 57.5 {
        nmk = "bc"
    } else if nam > 50 {
        nmk = "C"
    } else if nam > 40 {
        nmk = "D"
    } else if nam <= 40 {
        nmk = "E"
    }
    fmt.Println("Nilai mata kuliah: ", nmk)
}
```

Screenshot program

The screenshot shows a Go code editor interface with the following details:

- File Explorer:** Shows files in the current workspace, including `Welcome`, `guided1.go`, `guided2.go`, `guided3.go`, `soal1.go`, `soal2.go`, and `soal3.go`.
- Editor Area:** Displays the content of `soal2.go`. The code defines a function `main()` that takes a float64 input for a grade and prints the corresponding letter grade (A, B, C, D, E) using `fmt.Println`.
- Terminal:** Shows the output of running the program with different inputs:

```
PS C:\Users\tetuk\OneDrive\文檔\laprak mod 10> go run "c:\Users\tetuk\OneDrive\文檔\laprak mod 10\soal2.go"
Nilai akhir mata kuliah: 90.3
Nilai mata Kuliah: A
PS C:\Users\tetuk\OneDrive\文檔\laprak mod 10> go run "c:\Users\tetuk\OneDrive\文檔\laprak mod 10\soal2.go"
Nilai akhir mata kuliah: 70.6
Nilai mata Kuliah: B
PS C:\Users\tetuk\OneDrive\文檔\laprak mod 10> go run "c:\Users\tetuk\OneDrive\文檔\laprak mod 10\soal2.go"
Nilai akhir mata kuliah: 49.5
Nilai mata Kuliah: D
PS C:\Users\tetuk\OneDrive\文檔\laprak mod 10>
```
- Output Panel:** Shows the command prompt and the resulting output for each run.
- Chat Panel:** An AI-powered chat interface with the message "Ask about your code".
- System Tray:** Shows weather information (78°F, Light rain), system icons, and the date/time (11/23/2025, 6:37 PM).

Deskripsi program

Program diatas menjelaskan tentang kelompok nilai mata kuliah

3.soal 3

Source code

```
package main

import "fmt"

func main() {
    var angka int
    var faktor []int
    fmt.Scan(&angka)
    for i := 1; i <= angka; i++ {
        if angka%i == 0 {
            fmt.Print(i, " ")
            faktor = append(faktor, i)
        }
    }
    if len(faktor) == 2 {
        fmt.Println("true")
    } else {
        fmt.Println("false")
    }
}
```

Screenshot program

The screenshot shows a Go code editor interface with the following details:

- File Explorer:** Shows multiple files in the "OPEN EDITORS" section, including "Welcome", "guided1.go", "guided2.go", "guided3.go", "soal1.go", "soal2.go", and "soal3.go".
- Code Editor:** The current file is "soal3.go". The code defines a function `main()` that takes an integer input `angka` and prints its factors. It then checks if the number of factors is 2, printing "true" if so and "false" otherwise.
- Terminal:** The terminal window shows the command `go run "c:\Users\tetuk\OneDrive\文檔\laprak mod 10\soal3.go"`, followed by the output for numbers 1 through 12. The output is:

```
PS C:\Users\tetuk\OneDrive\文檔\laprak mod 10> go run "c:\Users\tetuk\OneDrive\文檔\laprak mod 10\soal3.go"
1 2 3 4 6 12 false
PS C:\Users\tetuk\OneDrive\文檔\laprak mod 10> go run "c:\Users\tetuk\OneDrive\文檔\laprak mod 10\soal3.go"
7
1 7 true
PS C:\Users\tetuk\OneDrive\文檔\laprak mod 10> 
```
- Chat Window:** A floating window titled "Ask about your code" is open, with the message "AI responses may be inaccurate." and a button "Generate Agent Instructions to onboard AI".
- System Tray:** Shows weather information ("Rainy days ahead 78°F") and system icons.

Deskripsi program

Program diatas untuk menentukan apakah termasuk bilangan prima atau bukan