

LAPORAN PRA KTIKUM

Algoritma Pemrograman

MODUL

IF- ELSE



Disusun oleh:

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S1IF-13-04

PROGRAM STUDI S1 INFORMATIKA

FAKULTAS INFORMATIKA

TELKOM UNIVERSITY PURWOKERTO

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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 program in a file named `guided1.go` within a project called `laprak mod 10`. The program is a simple conditional check to determine if a person can make a KTP (Indonesian National ID Card) based on their age and whether they have a family card.

```
1 package main
2
3 import "fmt"
4
5 func main() {
6     var usia int
7     var kk bool
8     fmt.Scan(&usia, &kk)
9     if usia >= 17 && kk {
10         fmt.Println("bisa membuat KTP")
11     } else {
12         fmt.Println("belum bisa membuat KTP")
13     }
14 }
15
```

The terminal output shows the execution of the program with the following commands and results:

```
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
bisa membuat KTP
PS C:\Users\tetuk\OneDrive\文档\laprak mod 10>
```

An input window is overlaid on the terminal, showing the user's input for the program:

```
name:muhammad tetuko Kemal pasha
nim :109082500181
kelas:S1-IF13-04
```

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

```
5 func main() {
6     var x rune
7     var huruf, vKecil, vBesar bool
8     fmt.Scanf("%c", &x)
9     huruf = (x >= 'a' && x <= 'z') || (x >= 'A' && x <= 'Z')
10    vKecil = x == 'a' || x == 'i' || x == 'u' || x == 'e' || x == 'o'
11    vBesar = x == 'A' || x == 'I' || x == 'U' || x == 'E' || x == 'O'
12    if huruf && (vKecil || vBesar) {
13        fmt.Println("vokal")
14    } else if huruf && !(vKecil || vBesar) {
15        fmt.Println("konsonan")
16    } else {
17        fmt.Println("bukan huruf")
18    }
19 }
20 }
```

```
PS C:\Users\tetuk\OneDrive\文档\laprak mod 10> go run "c:\Users\tetuk\OneDrive\文档\laprak mod 10\guided2.go"
A
vokal
PS C:\Users\tetuk\OneDrive\文档\laprak mod 10> go run "c:\Users\tetuk\OneDrive\文档\laprak mod 10\guided2.go"
f
konsonan
PS C:\Users\tetuk\OneDrive\文档\laprak mod 10> go run "c:\Users\tetuk\OneDrive\文档\laprak mod 10\guided2.go"
1
bukan huruf
PS C:\Users\tetuk\OneDrive\文档\laprak mod 10> go run "c:\Users\tetuk\OneDrive\文档\laprak mod 10\guided2.go"
$
bukan huruf
PS C:\Users\tetuk\OneDrive\文档\laprak mod 10> 
```

name:muhammad tetuko Kemal pasha
nim :109082500181
kelas:S1-IF13-04

Deskripsi program

Program diatas untuk menentukan huruf vocal atau konsonan

3. Guided

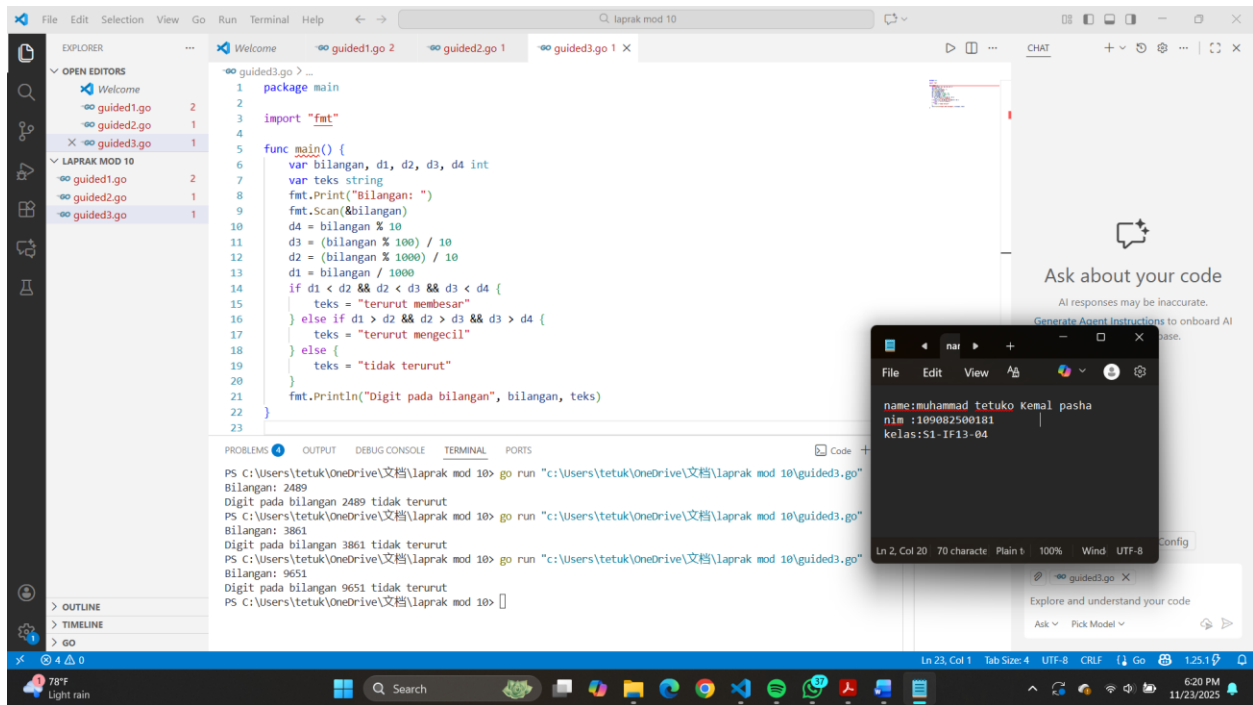
Source Code

```
package main

import "fmt"

func main() {
    var bilangan, d1, d2, d3, d4 int
    var teks string
    fmt.Print("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 Go program in a VS Code editor. The program is a sorting algorithm that takes a number and prints its digits in descending order. A chat window is overlaid on the right side of the editor, displaying a user's input and the program's output.

```
1 package main
2
3 import "fmt"
4
5 func main() {
6     var bilangan, d1, d2, d3, d4 int
7     var teks string
8     fmt.Print("Bilangan: ")
9     fmt.Scan(&bilangan)
10    d4 = bilangan % 10
11    d3 = (bilangan % 100) / 10
12    d2 = (bilangan % 1000) / 100
13    d1 = bilangan / 1000
14    if d1 < d2 && d2 < d3 && d3 < d4 {
15        teks = "terurut membesar"
16    } else if d1 > d2 && d2 > d3 && d3 > d4 {
17        teks = "terurut mengecil"
18    } else {
19        teks = "tidak terurut"
20    }
21    fmt.Println("Digit pada bilangan", bilangan, teks)
22 }
23 }
```

Chat window content:

```
name:muhammad tetuko Kemal pasha
nim :109082500181
kelas:S1-IF13-04
```

Terminal output:

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

Deskripsi program

Program diatas mengurutkan bilangan dari yang terkecil menjadi terbesar

1. soal 1

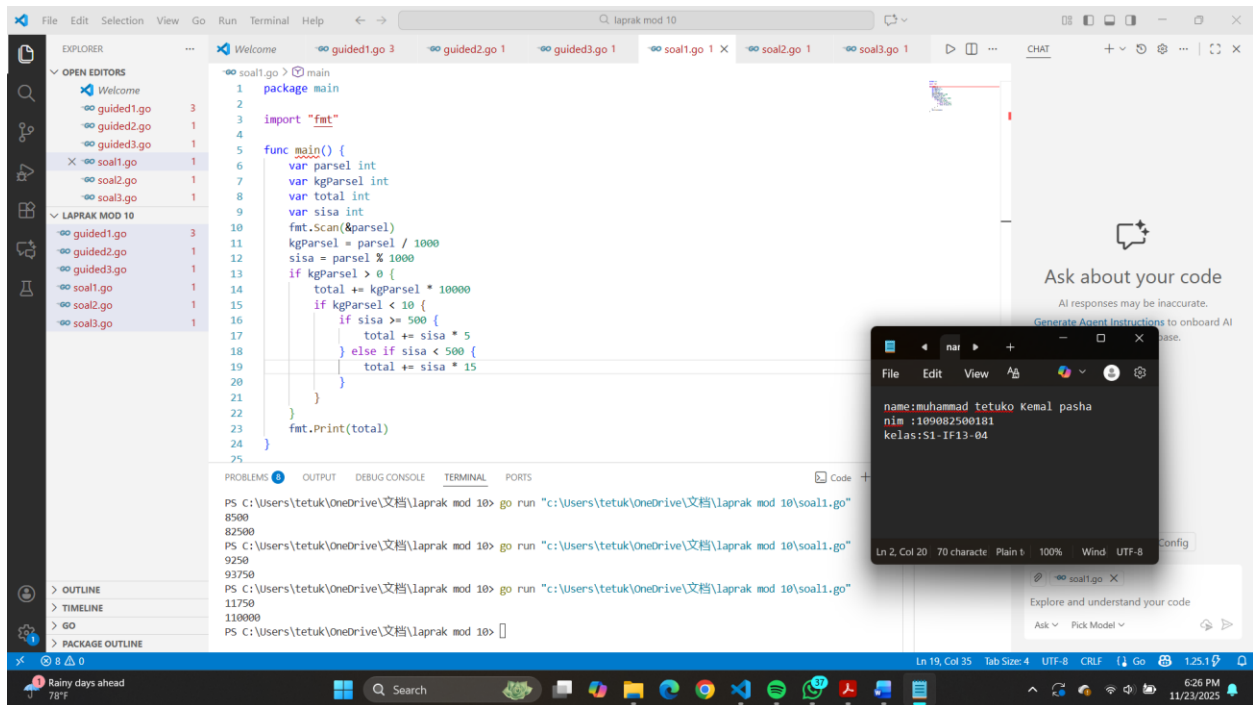
Source code

```
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.Print(total)
}
```

Screenshot program



Deskripsi program

Program diatas menjelaskan tentang biaya pengiriman

2. soal 2

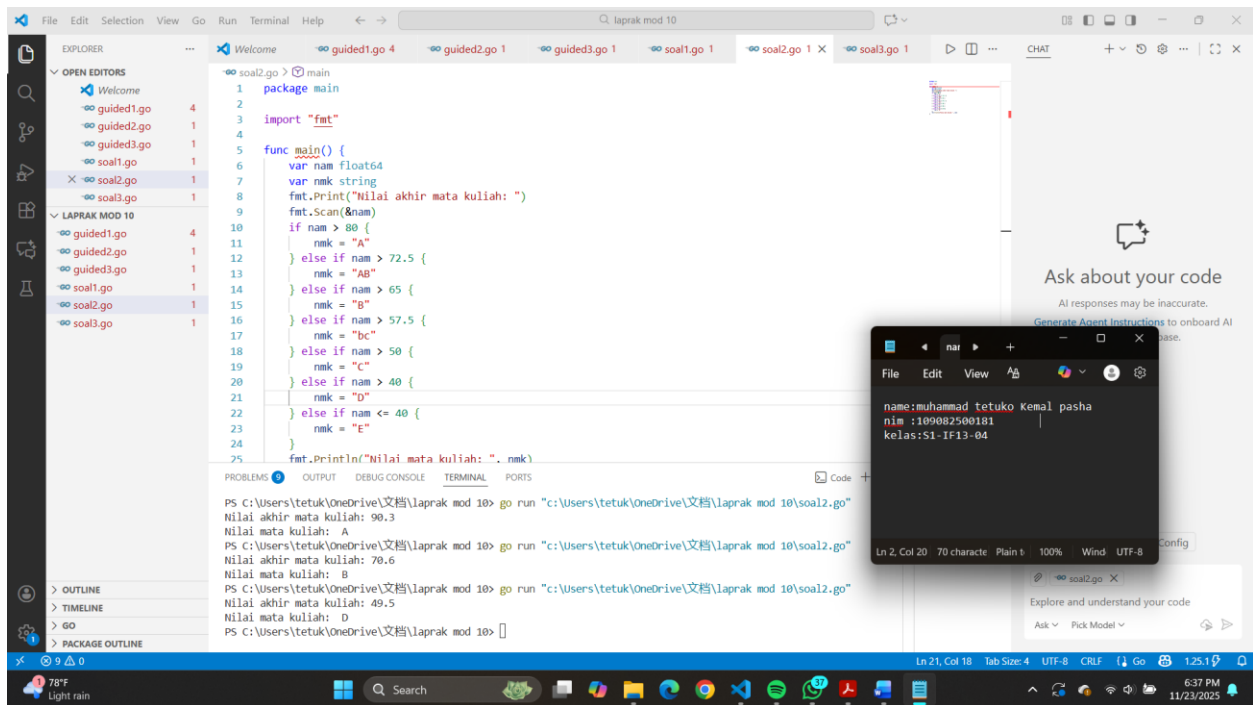
Source code

```
package main

import "fmt"

func main() {
    var nam float64
    var nmk string
    fmt.Print("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 program in VS Code. The Explorer pane on the left shows a project named 'LAPRAK MOD 10' with files 'guided1.go', 'guided2.go', 'guided3.go', 'soal1.go', 'soal2.go', and 'soal3.go'. The main editor displays 'soal2.go' with the following code:

```
1 package main
2
3 import "fmt"
4
5 func main() {
6     var nam float64
7     var nmk string
8     fmt.Print("Nilai akhir mata kuliah: ")
9     fmt.Scan(&nam)
10    if nam > 80 {
11        nmk = "A"
12    } else if nam > 72.5 {
13        nmk = "AB"
14    } else if nam > 65 {
15        nmk = "B"
16    } else if nam > 57.5 {
17        nmk = "BC"
18    } else if nam > 50 {
19        nmk = "C"
20    } else if nam > 40 {
21        nmk = "D"
22    } else if nam <= 40 {
23        nmk = "E"
24    }
25    fmt.Println("Nilai mata kuliah: ", nmk)
26 }
```

The Output pane at the bottom shows the execution results of the program:

```
PS C:\Users\tetuk\OneDrive\laprak mod 10> go run "c:\Users\tetuk\OneDrive\laprak mod 10\soal2.go"
Nilai akhir mata kuliah: 90.3
Nilai mata kuliah: A
PS C:\Users\tetuk\OneDrive\laprak mod 10> go run "c:\Users\tetuk\OneDrive\laprak mod 10\soal2.go"
Nilai akhir mata kuliah: 70.6
Nilai mata kuliah: B
PS C:\Users\tetuk\OneDrive\laprak mod 10> go run "c:\Users\tetuk\OneDrive\laprak mod 10\soal2.go"
Nilai akhir mata kuliah: 49.5
Nilai mata kuliah: D
PS C:\Users\tetuk\OneDrive\laprak mod 10>
```

A small window titled 'name:muhammad tetuko Kemal pasha' is overlaid on the right side of the screenshot, displaying the following information:

```
name:muhammad tetuko Kemal pasha
nim :109082500181
kelas:S1-IF13-04
```

Deskripsi program

Program diatas menjelaskan tentang kelompok nilai mata kuliah

3.soal 3

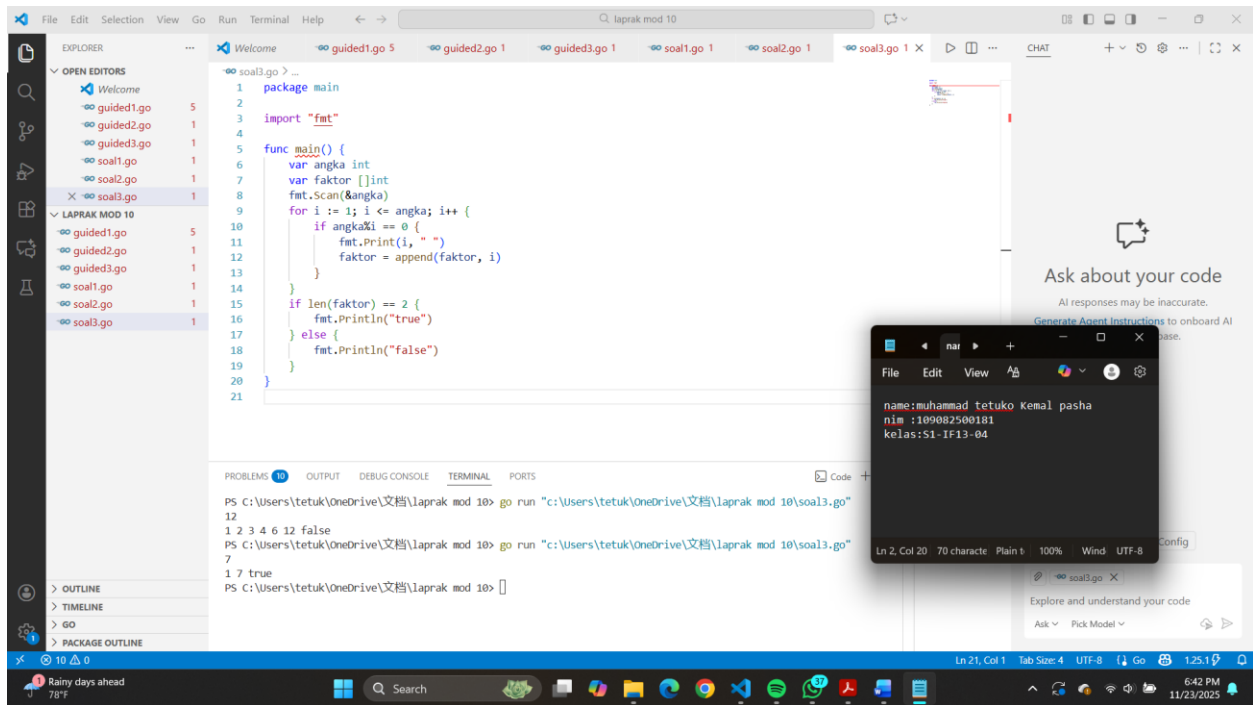
Source code

```
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



Deskripsi program

Program diatas untuk menentukan apakah termasuk bilangan prima atau bukan