

TUGAS 3
PRAKTIKUM PEMOGRAMAN BERBASIS WEB
Untuk Memenuhi Praktikum Pemograman Berbasis Web



Oleh:

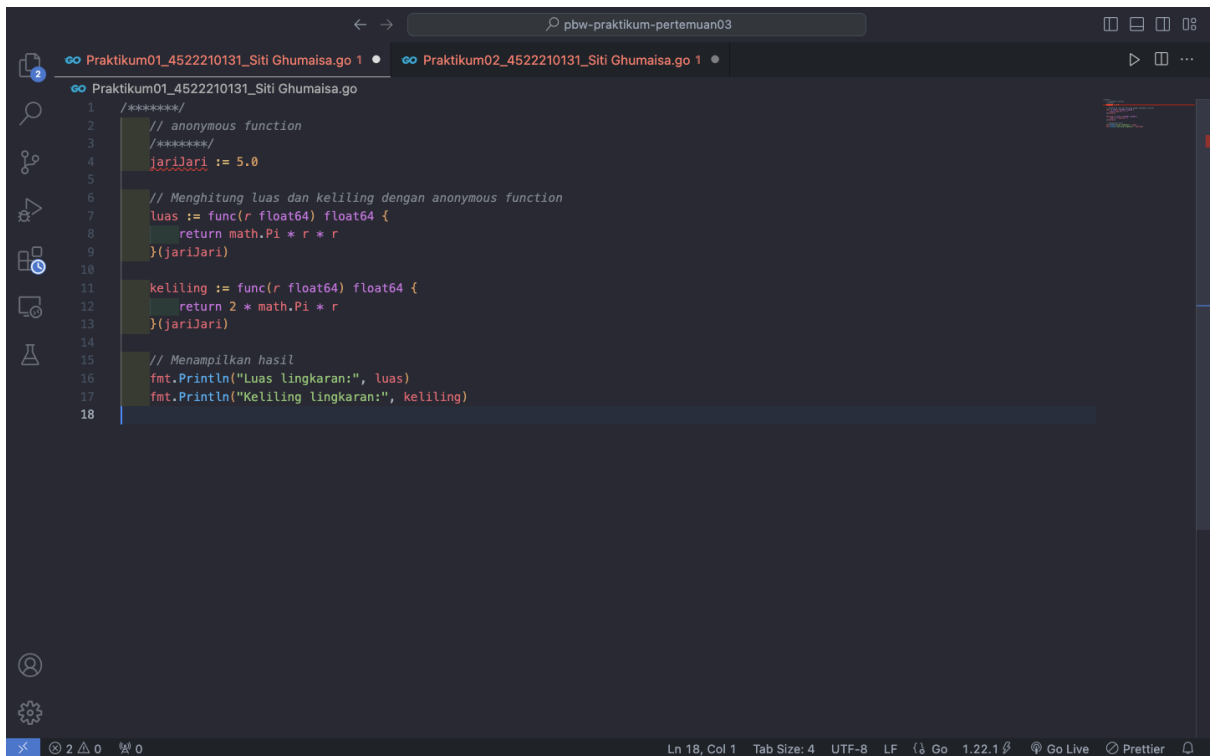
Nama : Siti Ghumaisa
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Kelas : A
Semester : 4 (Genap)

Dosen :

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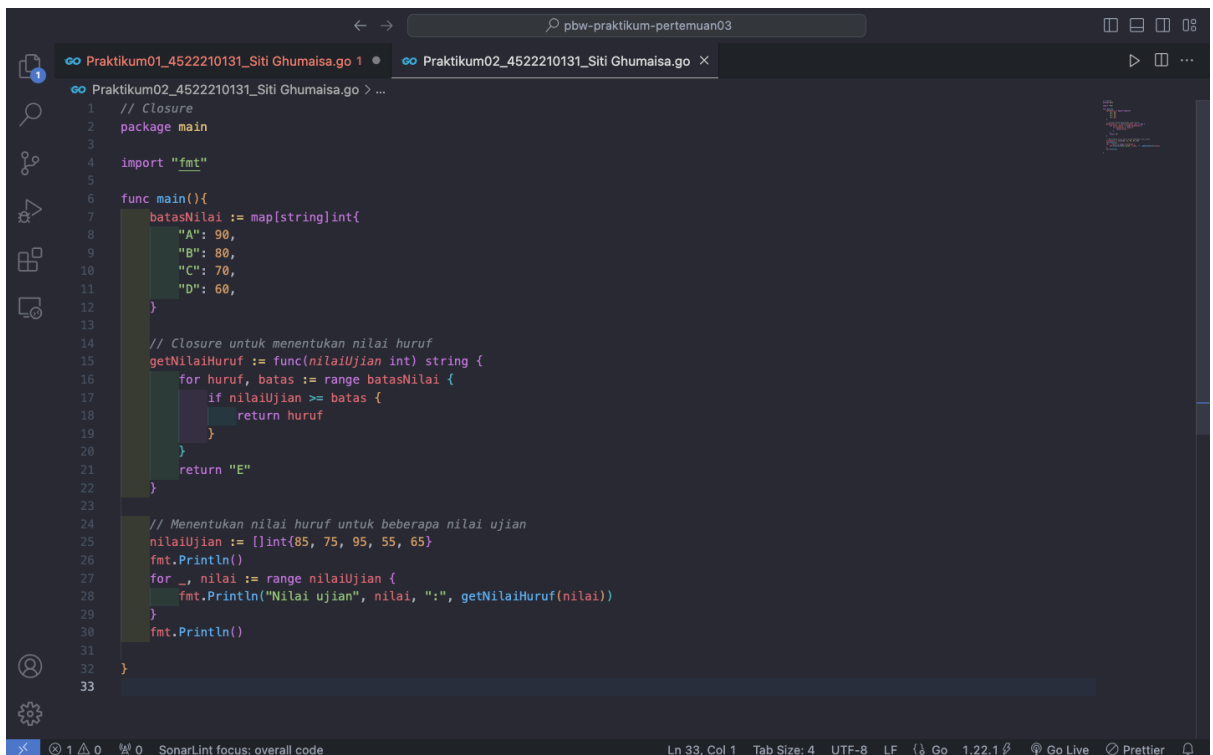
Anonymous function

- Program awal



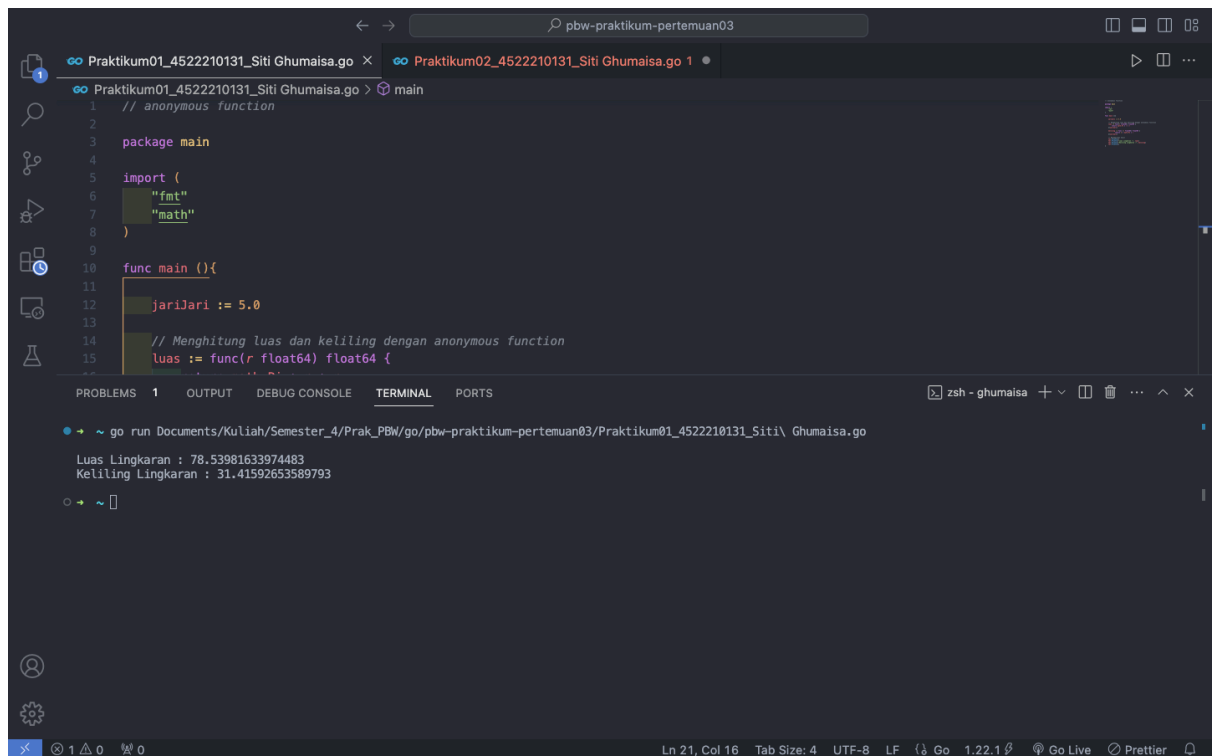
```
1 //*****  
2 // anonymous function  
3 //*****  
4 jariJari := 5.0  
5  
6 // Menghitung luas dan keliling dengan anonymous function  
7 luas := func(r float64) float64 {  
8     return math.Pi * r * r  
9 }(jariJari)  
10  
11 keliling := func(r float64) float64 {  
12     return 2 * math.Pi * r  
13 }(jariJari)  
14  
15 // Menampilkan hasil  
16 fmt.Println("Luas lingkaran:", luas)  
17 fmt.Println("Keliling lingkaran:", keliling)  
18
```

- Program setelah diperbaiki



```
1 // Closure  
2 package main  
3  
4 import "fmt"  
5  
6 func main(){  
7     batasNilai := map[string]int{  
8         "A": 90,  
9         "B": 80,  
10        "C": 70,  
11        "D": 60,  
12    }  
13  
14    // Closure untuk menentukan nilai huruf  
15    getNilaiHuruf := func(nilaiUjian int) string {  
16        for huruf, batas := range batasNilai {  
17            if nilaiUjian >= batas {  
18                return huruf  
19            }  
20        }  
21        return "E"  
22    }  
23  
24    // Menentukan nilai huruf untuk beberapa nilai ujian  
25    nilaiUjian := []int{85, 75, 95, 55, 65}  
26    fmt.Println()  
27    for _, nilai := range nilaiUjian {  
28        fmt.Println("Nilai ujian", nilai, ":", getNilaiHuruf(nilai))  
29    }  
30    fmt.Println()  
31 }  
32  
33
```

- Ouput



The screenshot shows a VS Code editor with two tabs: 'Praktikum01_4522210131_Siti Ghumaisa.go' and 'Praktikum02_4522210131_Siti Ghumaisa.go 1'. The first tab is active, displaying a Go program that calculates the area and circumference of a circle using an anonymous function. The program defines a package 'main', imports 'fmt' and 'math', sets a radius 'jariJari' to 5.0, and defines an anonymous function 'luas' to calculate the area. The 'main' function calls 'luas' and prints the results.

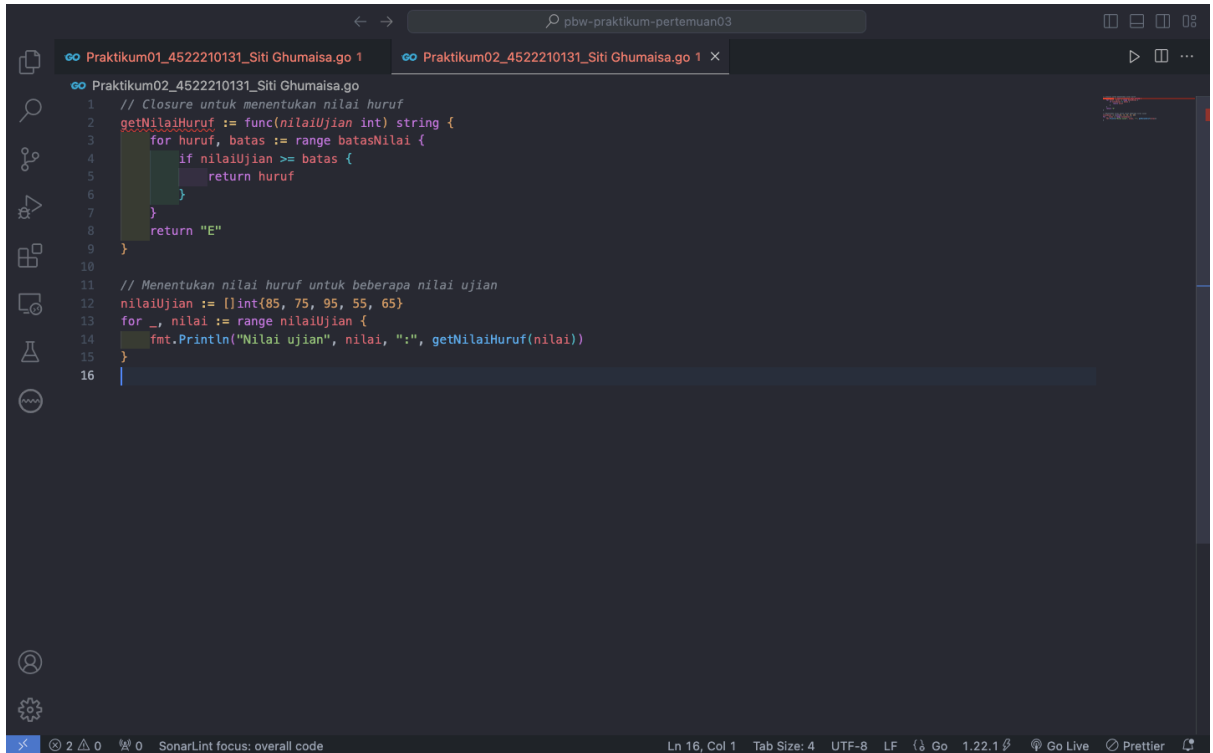
```
1 // anonymous function
2
3 package main
4
5 import (
6     "fmt"
7     "math"
8 )
9
10 func main () {
11     jariJari := 5.0
12     // Menghitung luas dan keliling dengan anonymous function
13     luas := func(r float64) float64 {
14         return math.Pi * r * r
15     }
16     fmt.Println("Luas Lingkaran : ", luas(jariJari))
17     fmt.Println("Keliling Lingkaran : ", 2 * math.Pi * jariJari)
18 }
```

The terminal output shows the command 'go run Documents/Kuliah/Semester_4/Prak_PBW/go/pbw-praktikum-pertemuan03/Praktikum01_4522210131_Siti\ Ghumaisa.go' and the resulting output: 'Luas Lingkaran : 78.53981633974483' and 'Keliling Lingkaran : 31.41592653589793'.

```
~ go run Documents/Kuliah/Semester_4/Prak_PBW/go/pbw-praktikum-pertemuan03/Praktikum01_4522210131_Siti\ Ghumaisa.go
Luas Lingkaran : 78.53981633974483
Keliling Lingkaran : 31.41592653589793
```

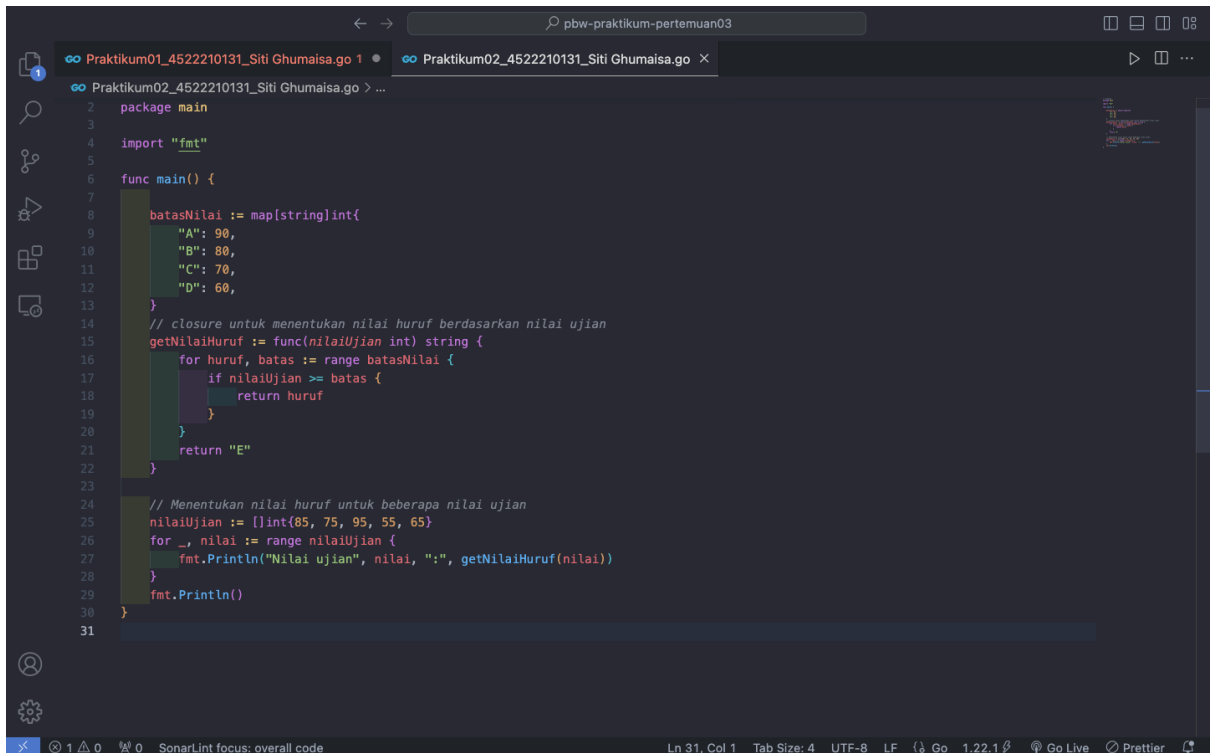
Closure

- Program awal



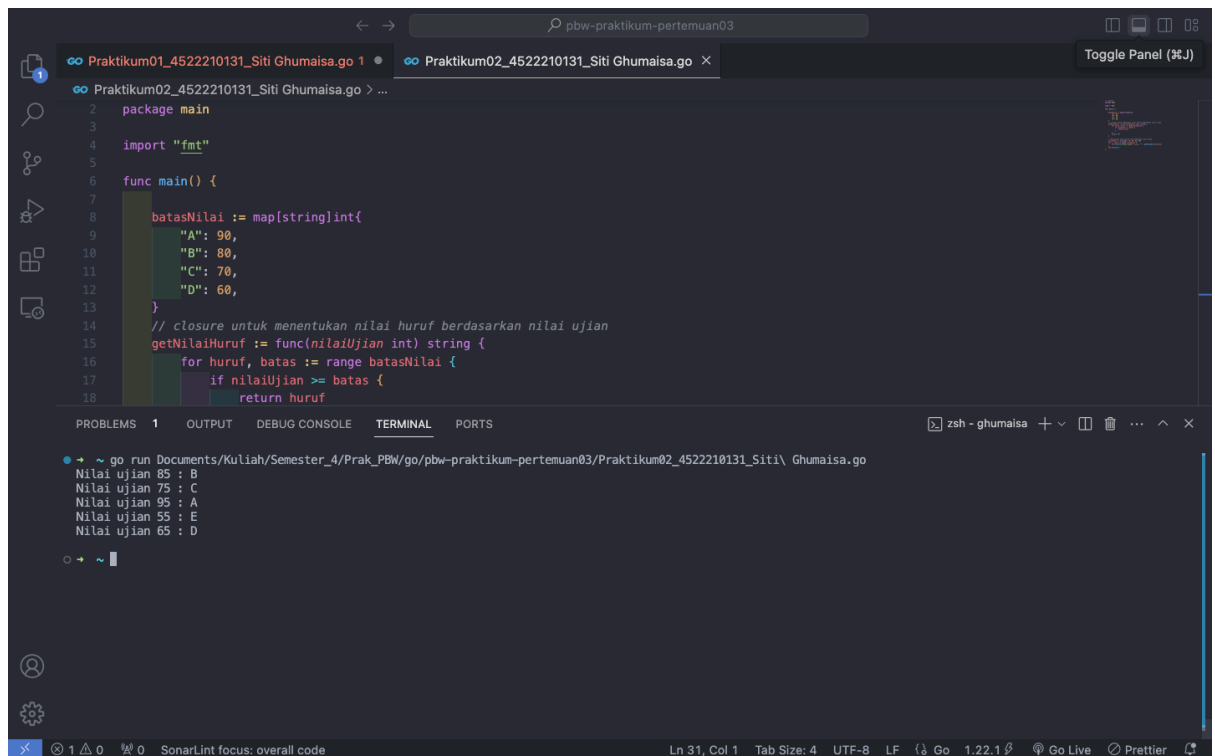
```
1 // Closure untuk menentukan nilai huruf
2 getNilaiHuruf := func(nilaiUjian int) string {
3     for huruf, batas := range batasNilai {
4         if nilaiUjian >= batas {
5             return huruf
6         }
7     }
8     return "E"
9 }
10
11 // Menentukan nilai huruf untuk beberapa nilai ujian
12 nilaiUjian := []int{85, 75, 95, 55, 65}
13 for _, nilai := range nilaiUjian {
14     fmt.Println("Nilai ujian", nilai, ":", getNilaiHuruf(nilai))
15 }
16
```

- Program setelah diperbaiki



```
2 package main
3
4 import "fmt"
5
6 func main() {
7
8     batasNilai := map[string]int{
9         "A": 90,
10        "B": 80,
11        "C": 70,
12        "D": 60,
13    }
14
15    // closure untuk menentukan nilai huruf berdasarkan nilai ujian
16    getNilaiHuruf := func(nilaiUjian int) string {
17        for huruf, batas := range batasNilai {
18            if nilaiUjian >= batas {
19                return huruf
20            }
21        }
22        return "E"
23    }
24
25    // Menentukan nilai huruf untuk beberapa nilai ujian
26    nilaiUjian := []int{85, 75, 95, 55, 65}
27    for _, nilai := range nilaiUjian {
28        fmt.Println("Nilai ujian", nilai, ":", getNilaiHuruf(nilai))
29    }
30    fmt.Println()
31}
```

- **Output**



The screenshot shows a VS Code editor with two tabs: 'Praktikum01_4522210131_Siti Ghumaisa.go' and 'Praktikum02_4522210131_Siti Ghumaisa.go'. The active tab is 'Praktikum02_4522210131_Siti Ghumaisa.go', which contains the following Go code:

```
1 package main
2
3 import "fmt"
4
5 func main() {
6     batasNilai := map[string]int{
7         "A": 90,
8         "B": 80,
9         "C": 70,
10        "D": 60,
11    }
12    // closure untuk menentukan nilai huruf berdasarkan nilai ujian
13    getNilaiHuruf := func(nilaiUjian int) string {
14        for huruf, batas := range batasNilai {
15            if nilaiUjian >= batas {
16                return huruf
17            }
18        }
19    }
20    fmt.Println("Nilai ujian 85 : B")
21    fmt.Println("Nilai ujian 75 : C")
22    fmt.Println("Nilai ujian 95 : A")
23    fmt.Println("Nilai ujian 55 : E")
24    fmt.Println("Nilai ujian 65 : D")
25}
```

The terminal output shows the execution of the program:

```
~ go run Documents/Kuliah/Semester_4/Prak_PBW/go/pbw-praktikum-pertemuan03/Praktikum02_4522210131_Siti Ghumaisa.go
Nilai ujian 85 : B
Nilai ujian 75 : C
Nilai ujian 95 : A
Nilai ujian 55 : E
Nilai ujian 65 : D
```

Link git hub

<https://github.com/Ghumaisa/PBW/tree/master/pbw-praktikum-pertemuan03>