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Kelas   : IT-46-03

SOAL1

```go
package main

import (
    "fmt"
    "math"
)

func main() {
    var R, r, t, t1 int
    var LS, ls, lp float64
    fmt.Scan(&R, &r, &t, &t1)
    hitungLuasSelimut_1303223064(r, t1, &ls)
    hitungLuasSelimut_1303223064(R, t, &LS)
    lp = luasAlas_1303223064(R) + luasAlas_1303223064(r) + LS - ls

    fmt.Println(LS)
    fmt.Println(ls)
    fmt.Println(lp)
}
func luasAlas_1303223064(r int) float64 {
    return float64(r) * float64(r) * 3.14
}
func garisPelukis_1303223064(r, t int) float64 {
    return math.Sqrt(float64(r*r) + float64(t*t))
}
func hitungLuasSelimut_1303223064(r int, t int, luas *float64) {
    var s float64
    s = garisPelukis_1303223064(r, t)
    *luas = 3.14 * float64(r) * s
}
```

```
D:\ALPRO_MOD8_IT-46-03_1303223064_ARF>go run soal1.go
10 7 20 14
702.125344934934
344.04141901811767
825.9439259168162

D:\ALPRO_MOD8_IT-46-03_1303223064_ARF>
```

SOAL2

```go
1   package main
2
3   import "fmt"
4
5   func main() {
6       var jam, menit int
7       var member bool
8       var total float64
9       fmt.Scan(&jam, &menit, &member)
10      hitungSewa__1303223064(jam, menit, member, &total)
11
12      fmt.Println(total)
13  }
14
15  func durasi_1303223064(jam, menit int) int {
16      if jam == 0 && menit != 0 {
17          return 1
18      } else if menit >= 10 {
19          return jam + 1
20      }
21      return jam
22  }
23
24  func potongan_1303223064(durasi, tarif int) float64 {
25      if durasi > 3 {
26          return float64(durasi*tarif) * 0.1
27      }
28      return 0
29  }
30
31  func tarif__1303223064(member bool) int {
32      if member {
33          return 3500
34      }
35      return 5000
36  }
37  func hitungSewa__1303223064(jam, menit int, member bool, biaya *float64) {
38      var durasi int = durasi_1303223064(jam, menit)
39      var tarif int = tarif__1303223064(member)
40      var diskon float64 = potongan_1303223064(durasi, tarif)
41      *biaya = float64(durasi*tarif) - diskon
42  }
```

```
D:\ALPRO_MOD8_IT-46-03_1303223064_ARF>go run soal2.go
0 0 true
0

D:\ALPRO_MOD8_IT-46-03_1303223064_ARF>go run soal2.go
0 5 false
5000

D:\ALPRO_MOD8_IT-46-03_1303223064_ARF>go run soal2.go
1 5 false
5000

D:\ALPRO_MOD8_IT-46-03_1303223064_ARF>go run soal2.go
3 42 true
12600

D:\ALPRO_MOD8_IT-46-03_1303223064_ARF>go run soal2.go
3 8 false
15000

D:\ALPRO_MOD8_IT-46-03_1303223064_ARF>
```

SOAL3

```go
1   package main
2
3   import "fmt"
4
5   func main() {
6       var x, y int
7       fmt.Scan(&x, &y)
8       display_1303223064(x, y)
9   }
10  func isFaktor_1303223064(num, x int) bool {
11      return num%x == 0
12  }
13  func jumlahFaktor_1303223064(num int, total *int) {
14      for i := 1; i < num; i++ {
15          if isFaktor_1303223064(num, i) {
16              *total += i
17          }
18      }
19  }
20  func perfect_1303223064(num int) bool {
21      var total int
22      jumlahFaktor_1303223064(num, &total)
23      return num == total
24  }
25  func display_1303223064(x, y int) {
26      fmt.Print("Barisan Perfect Number: ")
27      for x <= y {
28          if perfect_1303223064(x) {
29              fmt.Print(x, " ")
30          }
31          x++
32      }
33  }
```

```
D:\ALPRO_MOD8_IT-46-03_1303223064_ARF>go run soal3.go
1 10
Barisan Perfect Number: 6
D:\ALPRO_MOD8_IT-46-03_1303223064_ARF>go run soal3.go
30 350
Barisan Perfect Number:
D:\ALPRO_MOD8_IT-46-03_1303223064_ARF>go run soal3.go
6 8500
Barisan Perfect Number: 6 28 496 8128
D:\ALPRO_MOD8_IT-46-03_1303223064_ARF>
```

SOAL4

```go
package main

import "fmt"

func main() {
    var num, num1, num2 int
    fmt.Scanln(&num)
    split_1303223064(num, &num1, &num2)
    fmt.Println(num1, num2)
    fmt.Println(num1 + num2)
}
func len_1303223064(num int) int {
    var total int = 0

    for num > 0 {
        total++
        num /= 10
    }
    return total
}
func pangkat_1303223064(n int) int {
    var total int = 1
    for n > 0 {
        total *= 10
        n--
    }
    return total
}
func split_1303223064(num int, num1, num2 *int) {
    var mid int = len_1303223064(num) / 2
    *num1 = num / pangkat_1303223064(mid)
    *num2 = num % pangkat_1303223064(mid)
}
```

```
D:\ALPRO_MOD8_IT-46-03_1303223064_ARF>go run soal4.go
1234567
1234 567
1801

D:\ALPRO_MOD8_IT-46-03_1303223064_ARF>go run soal4.go
52
5 2
7

D:\ALPRO_MOD8_IT-46-03_1303223064_ARF>go run soal4.go
25098245
2509 8245
10754

D:\ALPRO_MOD8_IT-46-03_1303223064_ARF>
```

SOAL5

```go
package main

import "fmt"

func main() {
    var menu, tagihan, rombongan, i, n int
    var sisa bool
    fmt.Scan(&rombongan)
    for i = 1; i <= rombongan; i++ {
        fmt.Scan(&menu, &n, &sisa)
        hitungTarif_1303223064(menu, sisa, n, &tagihan)
        fmt.Println(tagihan)
    }
}

func tarif__1303223064(menu int) int {
    if menu <= 3 {
        return 10000
    } else if menu > 3 && menu <= 50 {
        return 10000 + (menu-3)*2500
    } else {
        return 100000
    }
}

func hitungTarif_1303223064(menu int, bersisa bool, n int, total *int) {
    if bersisa {
        *total = n * tarif__1303223064(menu)
    } else {
        *total = tarif__1303223064(menu)
    }
}
```

```
D:\ALPRO_MOD8_IT-46-03_1303223064_ARF>go run soal5.go
6
3 10 false
10000
3 10 true
100000
35 35 false
90000
35 40 true
3600000
100 100 false
100000
80 15 true
1500000
D:\ALPRO_MOD8_IT-46-03_1303223064_ARF>
```