SOAL TP modul 2

Nama : Muhamad Alwan Suryadi
NIM : 103032400104
Kelas : IT-48-01

Soal 1

```go
package main

import "fmt"

func reamur(celcius float64) float64 {
    var reamur float64
    reamur = celcius * 4 / 5
    return reamur
}

func fahrenheit(celcius float64) float64 {
    var fahrenheit float64
    fahrenheit = celcius*9/5 + 32
    return fahrenheit
}

func kelvin(celcius float64) float64 {
    var kelvin float64
    kelvin = celcius + 273
    return kelvin
}

func main() {
    var celcius_awal, celcius_akhir, step float64
    fmt.Scan(&celcius_awal, &celcius_akhir, &step)
    fmt.Printf("%-10s %-10s %-12s %-10s\n","Celcius","Reamur","Fahrenheit","Kelvin")
    for celcius_awal <= celcius_akhir {
        fmt.Printf("%-10.2f %-10.2f %-12.2f %-10.2f\n", celcius_awal, reamur(celcius_awal), fahrenheit(celcius_awal), kelvin(celcius_awal))
        celcius_awal += step
    }
}
```

```
D:\Matkul smester 2\Algoritma Pemrograman\praktikum>go run TP1.go
10 100 10
Celcius    Reamur     Fahrenheit   Kelvin
10.00      8.00       50.00        283.00
20.00      16.00      68.00        293.00
30.00      24.00      86.00        303.00
40.00      32.00      104.00       313.00
50.00      40.00      122.00       323.00
60.00      48.00      140.00       333.00
70.00      56.00      158.00       343.00
80.00      64.00      176.00       353.00
90.00      72.00      194.00       363.00
100.00     80.00      212.00       373.00

D:\Matkul smester 2\Algoritma Pemrograman\praktikum>go run TP1.go
10 50 5
Celcius    Reamur     Fahrenheit   Kelvin
10.00      8.00       50.00        283.00
15.00      12.00      59.00        288.00
20.00      16.00      68.00        293.00
25.00      20.00      77.00        298.00
30.00      24.00      86.00        303.00
35.00      28.00      95.00        308.00
40.00      32.00      104.00       313.00
45.00      36.00      113.00       318.00
50.00      40.00      122.00       323.00

D:\Matkul smester 2\Algoritma Pemrograman\praktikum>go run TP1.go
35.25 82.5 10.5
Celcius    Reamur     Fahrenheit   Kelvin
35.25      28.20      95.45        308.25
45.75      36.60      114.35       318.75
56.25      45.00      133.25       329.25
66.75      53.40      152.15       339.75
77.25      61.80      171.05       350.25
```

Soal 2

```go
package main
import "fmt"
import "unicode"

func lowToUpper(char rune)rune{
    return unicode.ToUpper(char)
}
func main (){
    var input rune
    fmt.Scanf("%c",&input)
    fmt.Printf("%c\n",lowToUpper(input))
```

```
D:\Matkul smester 2\Algoritma Pemrograman\praktikum>go run TP2.go
a
A

D:\Matkul smester 2\Algoritma Pemrograman\praktikum>go run TP2.go
z
Z

D:\Matkul smester 2\Algoritma Pemrograman\praktikum>go run TP2.go
m
M

D:\Matkul smester 2\Algoritma Pemrograman\praktikum>
```

Soal 3

```go
package main
import "fmt"

func check(bilangan_input,bilangan_cek int)bool{
    var temp int
    var found bool
    for bilangan_input > 0 {
        temp = bilangan_input % 10
        if temp == bilangan_cek {
            found = true
            break
        }
        bilangan_input /= 10
    }
    return found
}

func main() {
    var b1,b2 int
    var found bool

    fmt.Scan(&b1,&b2)
    found = check(b1,b2)
    if found {
        fmt.Println("YA")
    } else {
        fmt.Println("TIDAK")
    }
}
```

```
D:\Matkul smester 2\Algoritma Pemrograman\praktikum>go run TP3.go
172 7
YA

D:\Matkul smester 2\Algoritma Pemrograman\praktikum>go run TP3.go
999 9
YA

D:\Matkul smester 2\Algoritma Pemrograman\praktikum>go run TP3.go
1234 5
TIDAK

D:\Matkul smester 2\Algoritma Pemrograman\praktikum>
```