**GO**

Для работы с VS code на винде нужно:

1. Go
2. Code runner

Auto save and preference-setting-extensions-code runner and enable run in terminal

package main

import "fmt"

func main() {

fmt.Println("Hello, 世界")

}

package main

import (

"fmt"

"time"

)

func main() {

fmt.Println("Welcome to the playground!")

fmt.Println("The time is", time.Now())

}

package main

import (

"fmt"

"math/rand"

)

func main() {

fmt.Println("My favorite number is", rand.Intn(10)) – всегда выводит значение 1

}

Rand.Seed()

package main

import (

"fmt"

"math"

)

func main() {

fmt.Printf("Now you have %g problems.\n", math.Sqrt(7))

}

package main

import (

"fmt"

"math"

)

func main() {

fmt.Println(math.Pi) #исправил ошибку pi

}

package main

import "fmt"

func add(x, y int) int {

return x + y

}

func main() {

fmt.Println(add(42, 13))

}

package main

import "fmt"

func swap(x, y string) (string, string) {

return y, x

}

func main() {

a, b := swap("hello", "world")

fmt.Println(a, b)

}

package main

import "fmt"

func split(sum int) (x, y int) {

x = sum \* 4 / 9

y = sum - x

return

}

func main() {

fmt.Println(split(17))

}

package main

import "fmt"

var c, python, java bool

func main() {

var i int

fmt.Println(i, c, python, java)

}

package main

import "fmt"

var i, j int = 1, 2

func main() {

var c, python, java = true, false, "no!"

fmt.Println(i, j, c, python, java)

}

package main

import "fmt"

func main() {

var i, j int = 1, 2

k := 3

c, python, java := true, false, "no!"

fmt.Println(i, j, k, c, python, java)

}

package main

import (

"fmt"

"math/cmplx"

)

var (

ToBe bool = false

MaxInt uint64 = 1<<64 - 1

z complex128 = cmplx.Sqrt(-5 + 12i)

)

func main() {

fmt.Printf("Type: %T Value: %v\n", ToBe, ToBe)

fmt.Printf("Type: %T Value: %v\n", MaxInt, MaxInt)

fmt.Printf("Type: %T Value: %v\n", z, z)

}

package main

import "fmt"

func main() {

var i int

var f float64

var b bool

var s string

fmt.Printf("%v %v %v %q\n", i, f, b, s)

}

package main

import (

"fmt"

"math"

)

func main() {

var x, y int = 3, 4

var f float64 = math.Sqrt(float64(x\*x + y\*y))

var z uint = uint(f)

fmt.Println(x, y, z)

}