A panic generally indicates a programmer error for example attempting to access an index of an array that's out of bounds, forgetting to initialize a map. Panic is used to cause run time error.

Recover is used to handle run time error. Recover stops the panic and returns the value that was passed to panic.

The call to recover will not be executed because the call the panic from recover immediately stops execution. To solve that problem we have to use defer by associating it with the function where recover is implemented.

package main

import "fmt"

func main() {

defer func() {

str := recover()

fmt.Println(str)

}()

panic("PANIC")

}