

# init Function

01

About

02

Examples

# init Function

- | Common to have an initialization step in programs
  - | Creating a function named `init()` will perform initialization
  - | `init()` is ran before the `main()` function
- | Allows creation and validation of program state before execution begins
  - | Check network connections, database connections, cache expensive operations, etc

# Example

```
var EmailExpr *regexp.Regexp

func init() {
    compiled, ok := regexp.Compile(`.+@.+\.+`)
    if ok != nil {
        panic("failed to compile regular expression")
    }
    EmailExpr = compiled
    fmt.Println("regular expression compiled successfully")
}
```

# Example

```
var EmailExpr *regexp.Regexp

func isValidEmail(addr string) bool {
    return EmailExpr.Match([]byte(addr))
}

func main() {
    fmt.Println(isValidEmail("invalid"))
    fmt.Println(isValidEmail("valid@example.com"))
    fmt.Println(isValidEmail("invalid@example"))
}
```

# Notes

- | Each package can have it's own `init()` function
- | All packages will execute `init()` before `main()` runs