Module 1: Functions and Organization
Topic 1.1: Why Use Functions?

What is a Function

- A set of instructions with a name (usually)

```
func main() {
    fmt.Printf("Hello, world.")
}
```

```
func PrintHello() {
    fmt.Printf("Hello, world.")
}
func main() {
    PrintHello()
}
```

- Function declaration, name, call

Reusability

- You only need to declare a function once

- Good for commonly used operations

- Graphics editing program might have `ThresholdImage()`

- Database program might have `QueryDbase()`

- Music program might have `ChangeKey()`

Abstraction

- Details are hidden in the function
- Only need to understand input/output behavior
- Improves understandability

```
func FindPupil() {
    GrabImage()
    FilterImage()
    FindEllipses()
}
```

- Naming is important for clarity