# FLOW CHART

## PYTHON BASICS

*prepared by:*

### Gyro A. Madrona

Electronics Engineer

# TOPIC OUTLINE

**Flowchart**

# FLOWCHART

# FLOWCHART

A **flowchart** is a **graphical** representation of an algorithm or process. It uses various symbols to represent different actions or steps in the process. Flowcharts are often used to plan the logic of a program before writing the actual code.
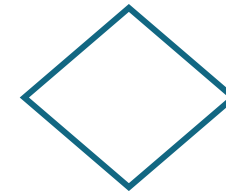
## Flowchart Symbols

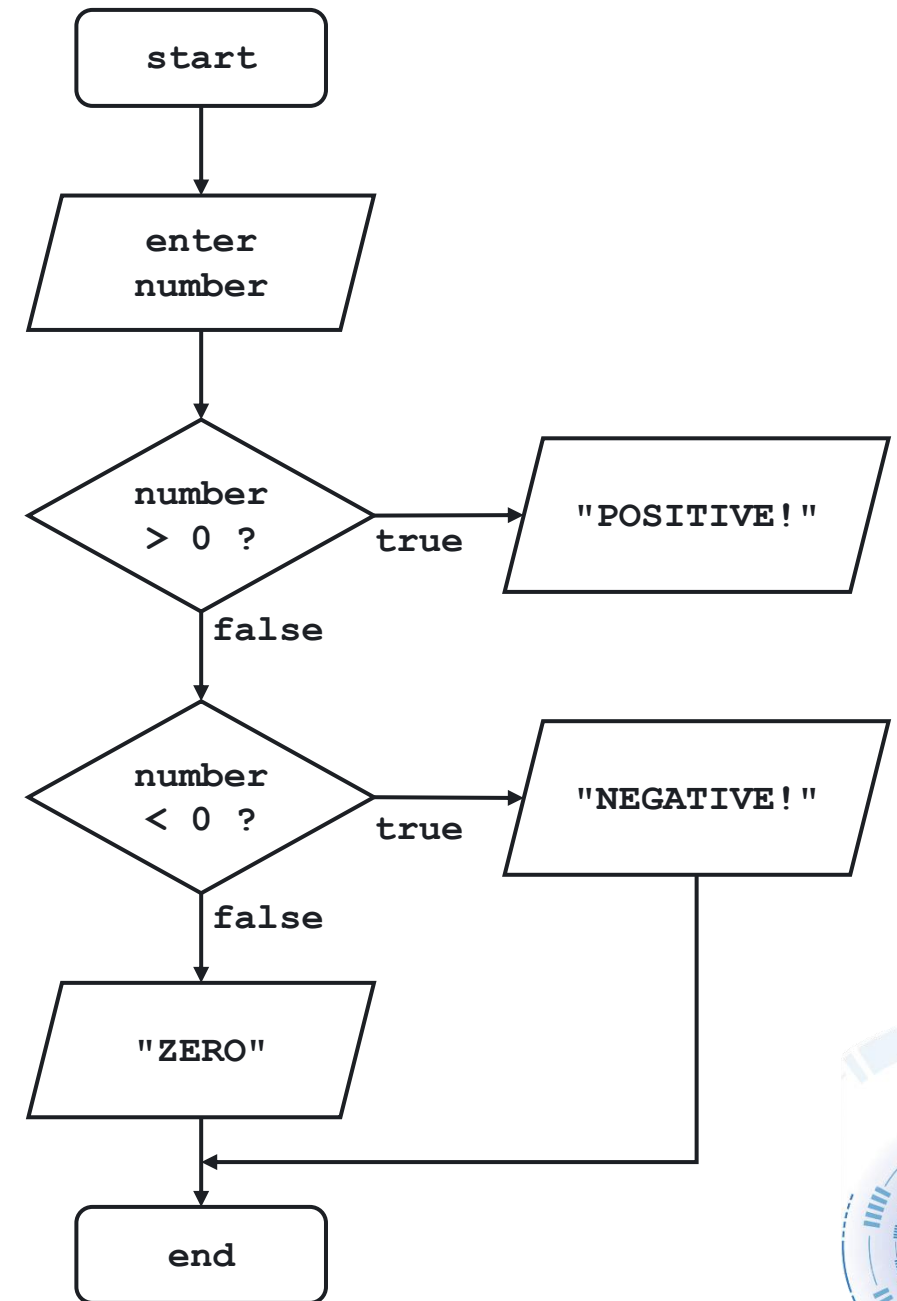| Symbol | Description |
|---|---|
| (rounded rectangle) | Represents the **beginning** or **end** of the program. |
| (rectangle) | Represents a **process** or **action**, such as calculations or assignments. |
| (diamond) | Represents a **decision point** which is evaluated as either `True` or `False`. |
| (parallelogram) | Represents **input** or **output** operations, such as reading data or displaying results. |
| (arrow) | Shows the **direction** of the process flow. |

# EXERCISE

Grade Remarks Flowchart
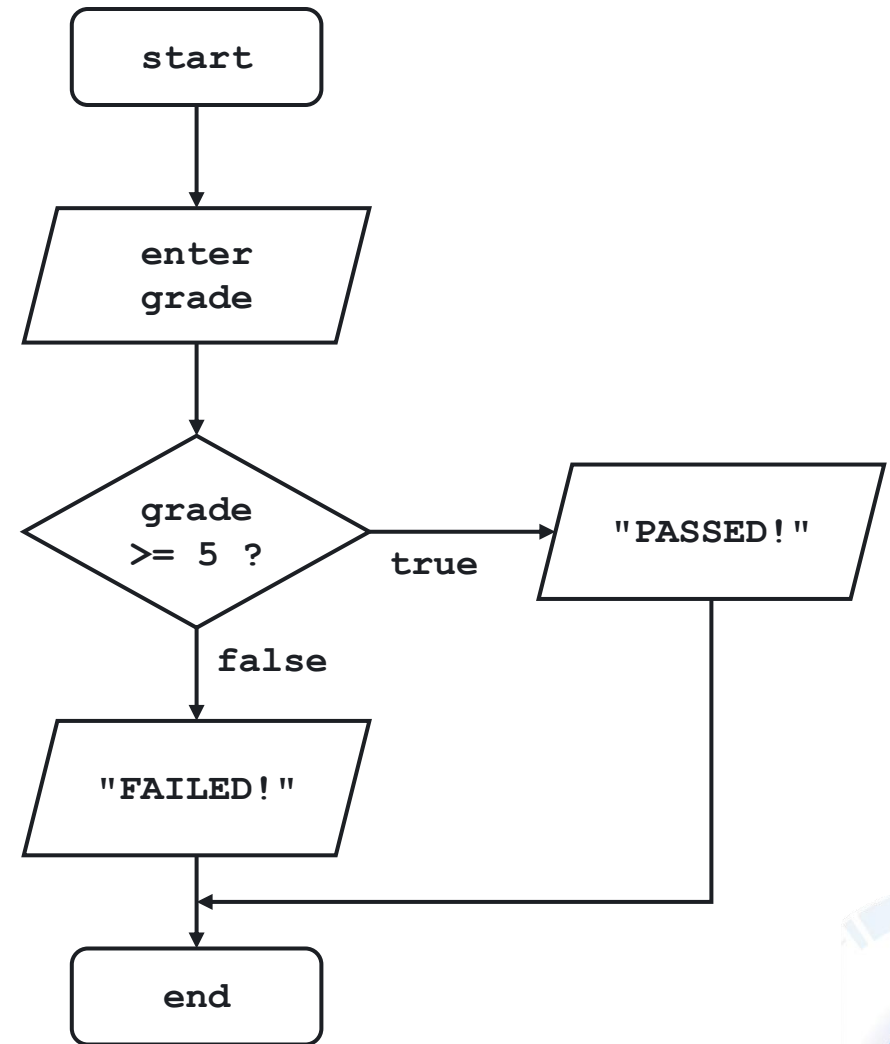
# **EXERCISE**

Odd or Even Number Flowchart

```
          ┌─────────────┐
          │    start     │
          └─────────────┘
                 │
                 ▼
          ╱─────────────╲
          │    enter     │
          │    number    │
          ╲─────────────╱
                 │
                 ▼
          ┌─────────────┐
          │ remainder =  │
          │  number%2    │
          └─────────────┘
                 │
                 ▼
            ╱─────────╲
           ╱ remainder ╲        true      ╱──────────╲
          ⟨   == 0 ?    ⟩ ──────────────▶ │ "EVEN!"   │
           ╲           ╱                   ╲──────────╱
            ╲─────────╱
                 │ false
                 ▼
          ╱─────────────╲
          │   "ODD!"     │
          ╲─────────────╱
                 │
                 ▼
          ┌─────────────┐
          │    end       │
          └─────────────┘
```
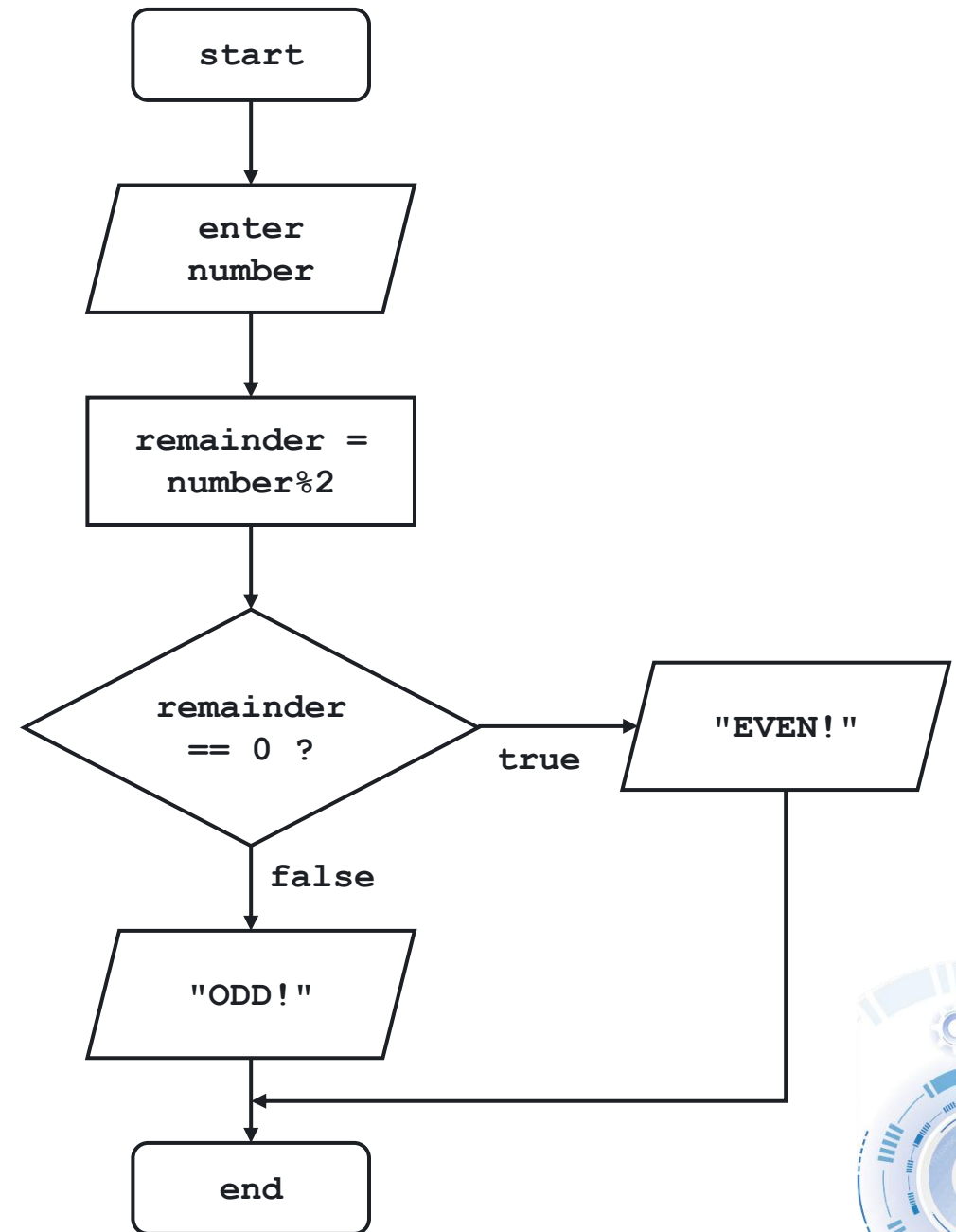
# EXERCISE

Positive, Negative, or Zero Number Flowchart

# LABORATORY