**Fundamentals** | Control flow using "if"
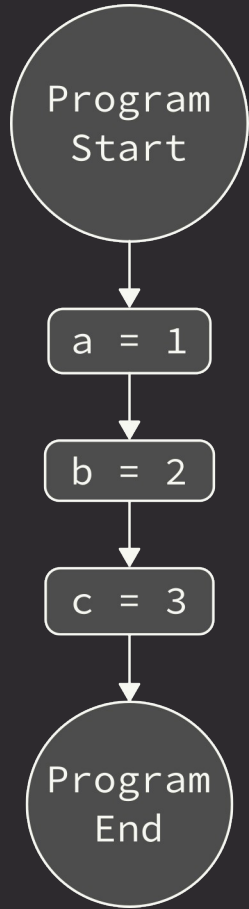
# Execution Flow

- Code executed line-by-line
- Actions are performed & control flow may change
  - Specific conditions can change control flow
    - "if"
    - "else"
    - "else if"

# Example — Simple Flow

Program
Start

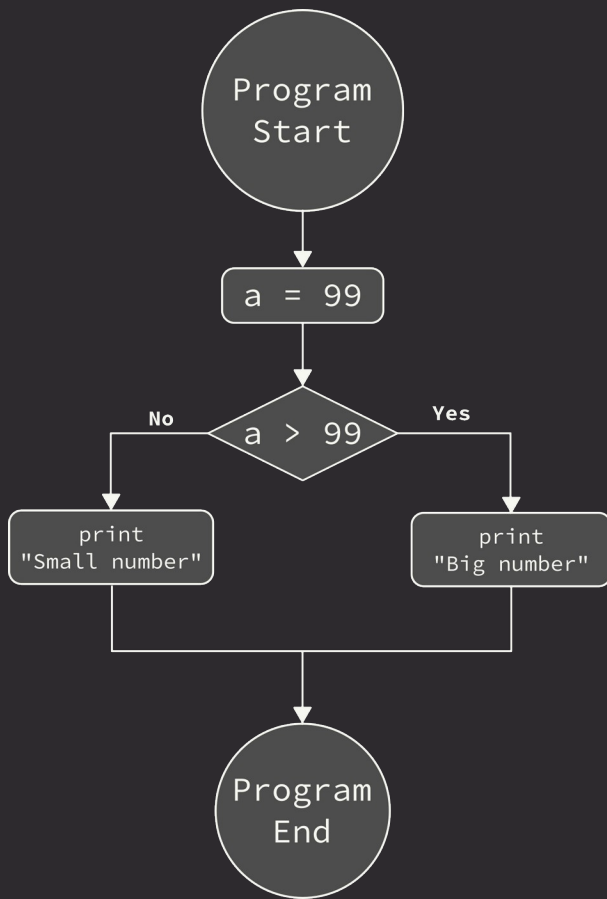a = 1

b = 2

c = 3

Program
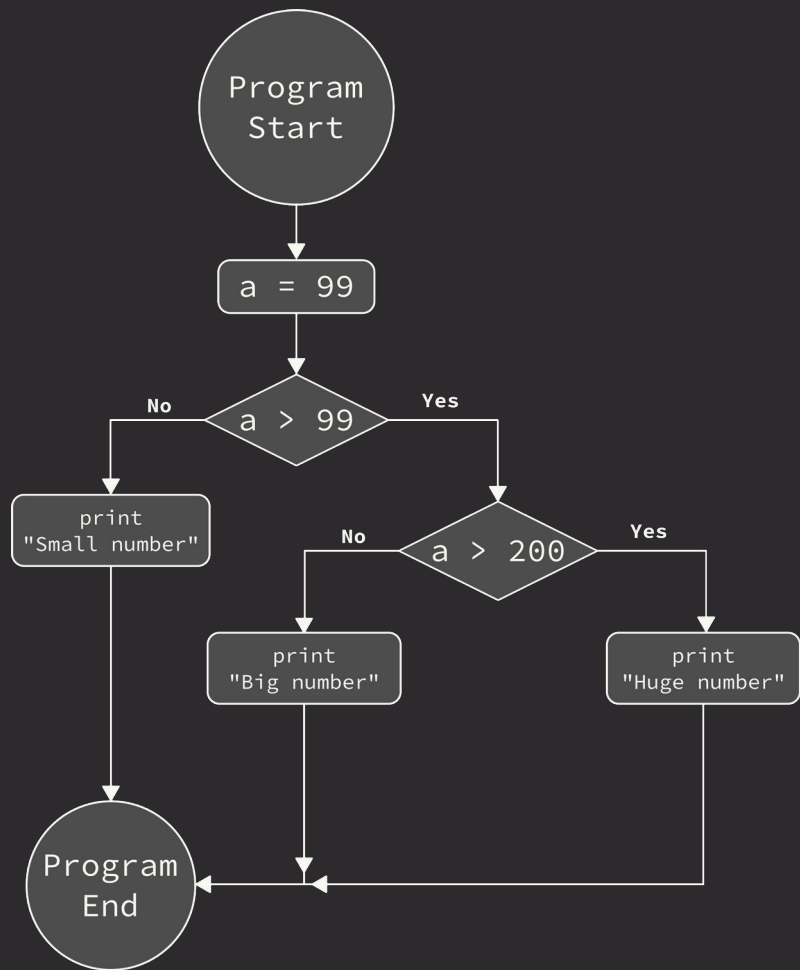End

```
let a = 1;
let b = 2;
let c = 3;
```
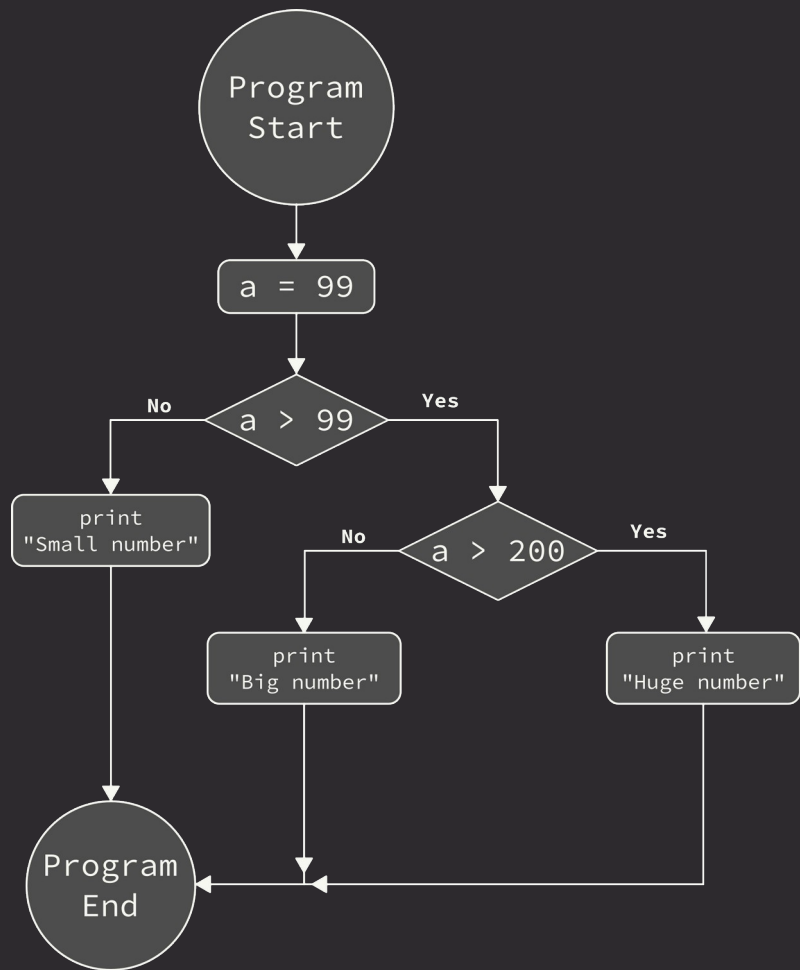
# Example – if..else



```
let a = 99;
if a > 99 {
    println!("Big number");
} else {
    println!("Small number");
}
```

# Example – Nested if..else



```
let a = 99;
if a > 99 {
    if a > 200 {
        println!("Huge number");
    } else {
        println!("Big number");
    }
} else {
    println!("Small number");
}
```

# Example - if..else if..else



```rust
let a = 99;
if a > 200 {
    println!("Huge number");
}
else if a > 99 {
    println!("Big number");
} else {
    println!("Small number");
}

// This will not work
if a > 99 {
    println!("Big number");
} else if a > 200 {
    println!("Huge number");
} else {
    println!("Small number");
}
```

# Recap

- Code executes line-by-line
    - This can be changed using "if"
- Try to always include "else", unless there truly is no alternative case