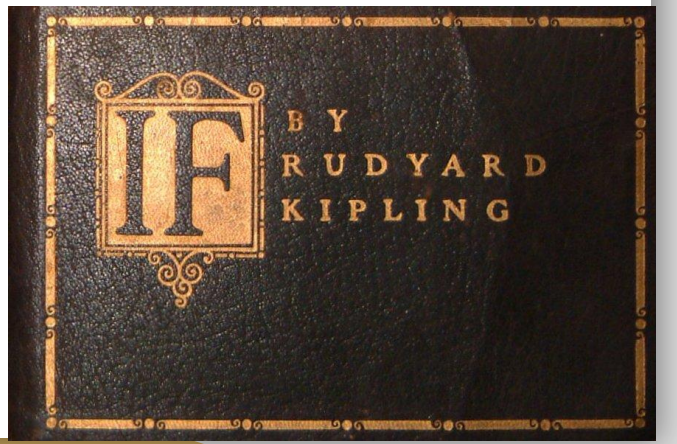
# Conditionals

# Conditionals (pseudocode notation)

- **If** <something is true>
  - <Do something>

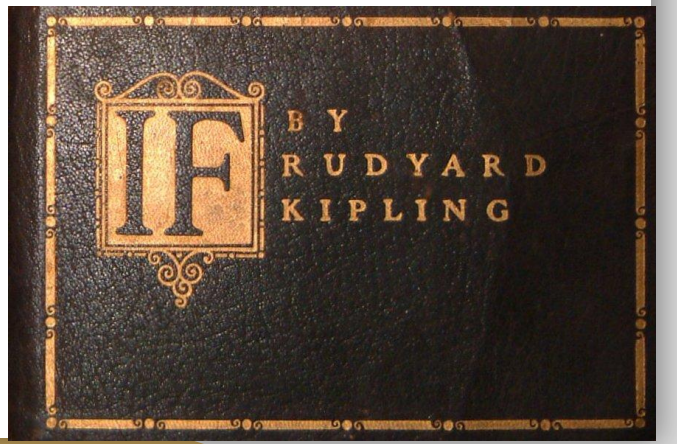
*Example...*

- **If** <humidity >= 90%>
  - No sportcoats



# Conditionals (C Notation)

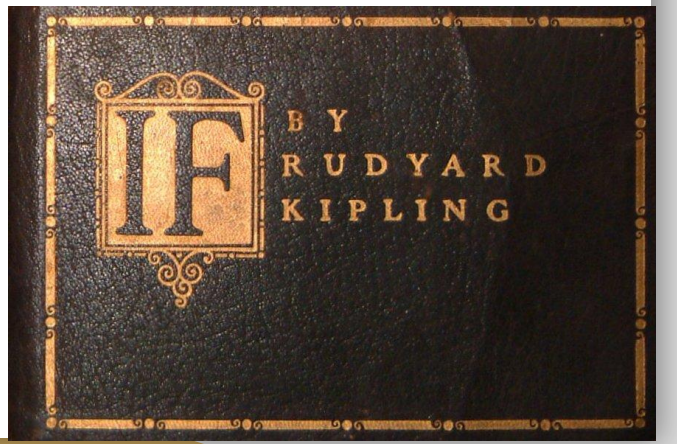
```
if (temp >= 90) {
        printf(“No sportcoats\n”);
}
```



# Conditionals (C Notation)

```
if (temp >= 90) {
        printf("No sportcoats\n");
}
```

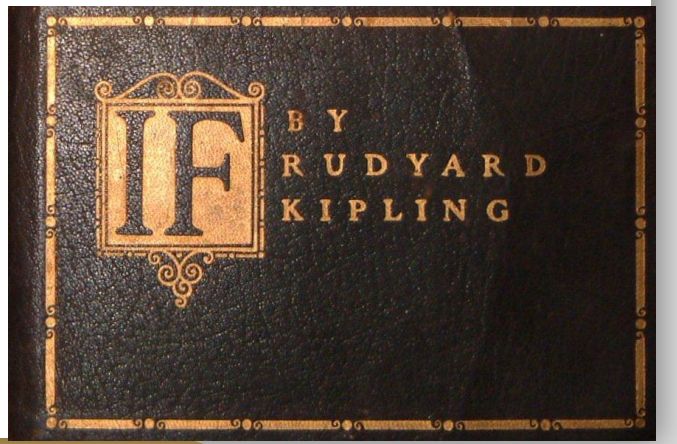
**"if" is lowercase, along the right column of the current indentation**



# Conditionals (C Notation)

```
if (temp >= 90) {
    printf("No sportcoats\n");
}
```

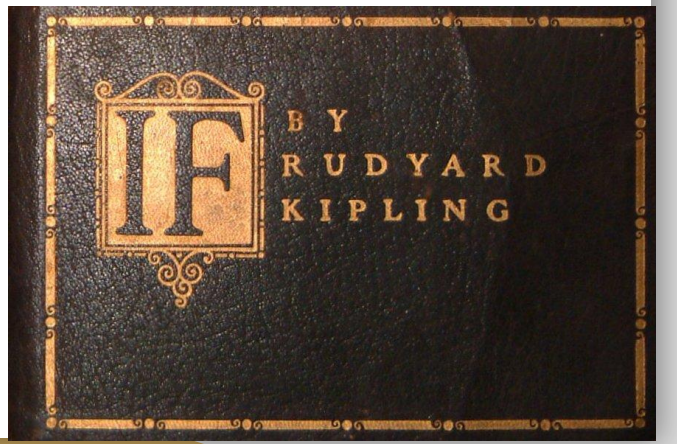
**Mathematical truth statement - if this is valid (true), the if statement is valid**



# Conditionals (C Notation)

```
if (temp >= 90) {
    printf("No sportcoats\n");
}
```

**In this statement, *temp* should be declared and initialized before use in the if statement**

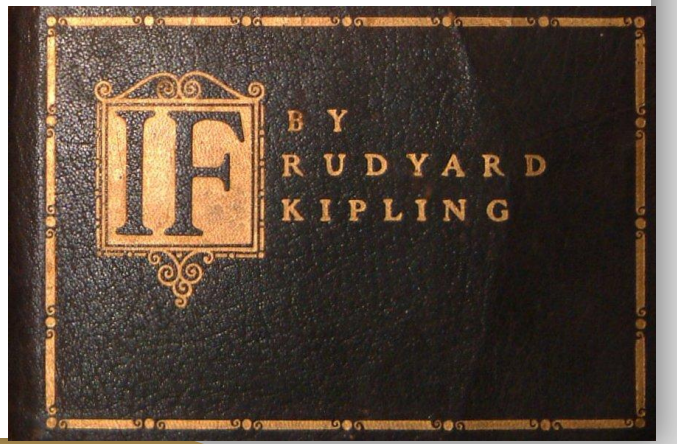


# Conditionals (C Notation)

```
if (temp >= 90) {
    printf("No sportcoats\n");
}
```

**NO SEMICOLON**

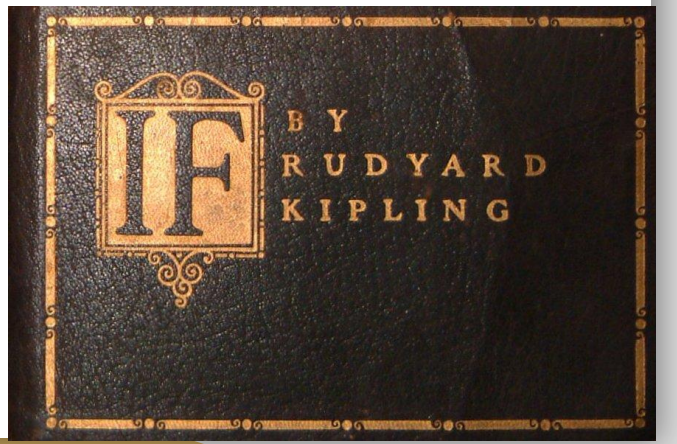
**If statements end in {} → similar to main()**



# Conditionals (C Notation)

```
if (temp >= 90) {
    printf("No sportcoats\n");
}
```

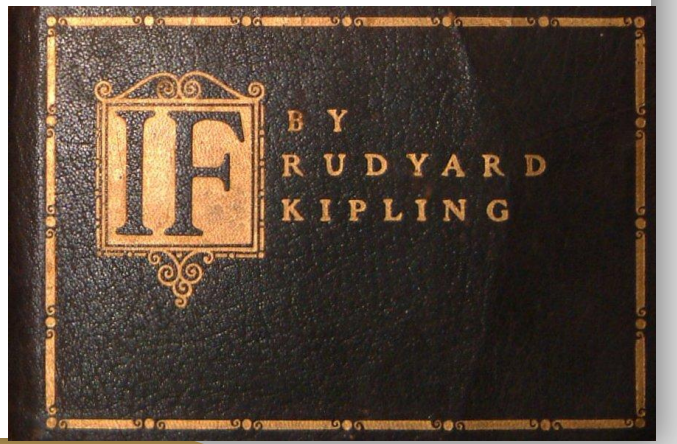
**Any code can go inside the if statement → but it MUST be tabbed in one level**



# Conditionals (C Notation)

```
if (temp >= 90) {
        printf(“No sportcoats\n”);
}
```

**Every {} → one tab**



# Relational Operators

“Equals” → ==

“Does not equal” → !=

“Less than” → <

“Greater than” → >

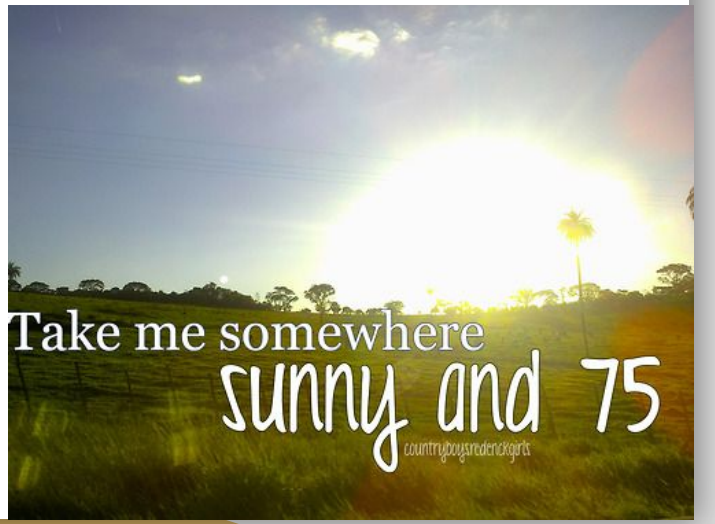
“Greater than or equal to” → >=

“Less than or equal to” → <=

# Conditionals (C Notation)

*Example if statements:*

```
if (temp == 75) {
      printf(“Temp is exactly 75\n”);
}
```



# Conditionals (C Notation)

*Example if statements:*

```
if (temp != 75) {
        printf(“Temp is anything but 75\n”);
}
```

# If Statement Challenge 1


- Scan in a number
- If that number is 42, print out “You have found the meaning of life”
- If that number is not 42, print out “Keep searching”