

Conditional Statements

Day 6 – PH 365

14 Oct 2024

Review – Tracking Errors

Some common errors and fixes:

Indentation Error – always indent after a loop statement

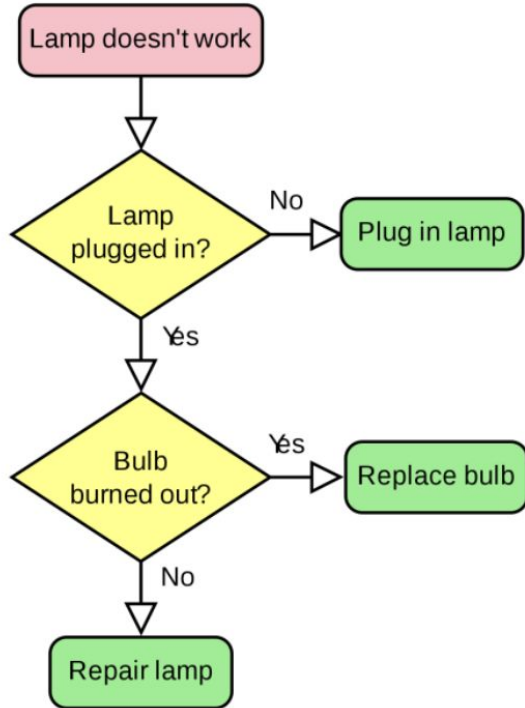
Syntax Error, missing ‘:’ – always use a colon after loop statement

Type Error, object not callable – use square brackets for lists, not parentheses

Name Error, name is not defined

- Check your spelling
- Run all your code cells

Conditional statements are like flowcharts



Conditional statements in computers

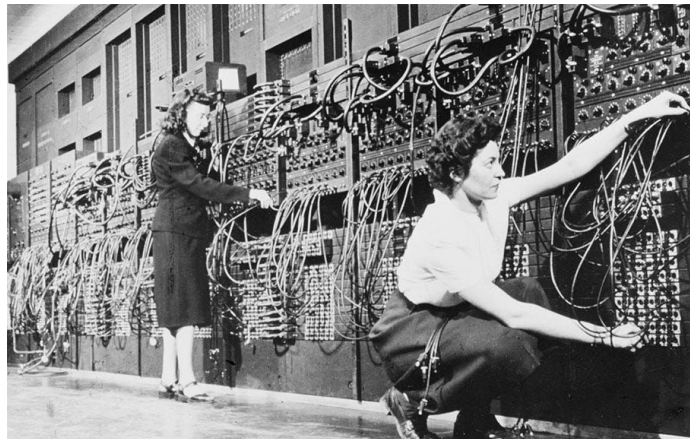
Conditional statements were theorized for programs and implemented in computers alongside loops

Conditional statements use **conditions**

While loops also use conditions:

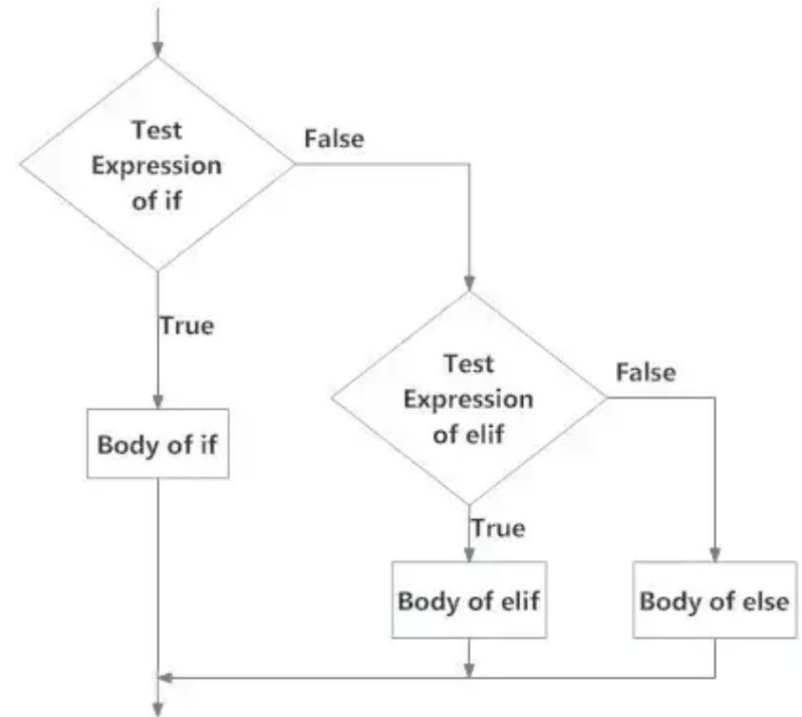
```
while i < 25:
```

Anything that evaluates to **True** or **False**



Structure and syntax of conditional statements

```
if expression1:  
    body of if  
elif expression2:  
    body of elif  
else:  
    body of else
```



Structure and syntax of conditional statements

Key features:

- colons and indentations
- **if/elif/else** structure
- Boolean expressions
- body of each conditional statement

Change variable values to achieve different outcomes

```
scale = 0

if scale == 10:
    print("All of this is easy-peasy to me.")
elif scale == 8 or scale == 9:
    print("This code is a little unfamiliar,")
elif scale >= 5 and scale <= 7:
    print("I feel pretty good about True/Fal")
elif scale in [2, 3, 4]:
    print("I feel okay about flowcharts, but")
elif scale == 1:
    print("Oh no, what am I getting myself i")
else:
    print("Not a valid input. Use numbers 1-
```

Structure and syntax of conditional statements

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elif scale >= 5 and scale <= 7:
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elif scale in [2, 3, 4]:
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```
elif scale == 1:
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```
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```

```
else:
```

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    print("Not a valid input. Use numbers 1-
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