

# Review



# Making Decisions

**If** it's raining, we wear rain boots

**Else if** it's snowing, we wear snow boots

**Else** we wear sneakers



```
weather = "raining"
shoe_type = ""

if weather == "raining":
    shoe_type = "rain boots"
elif weather == "snowing":
    shoe_type = "snow boots"
else:
    shoe_type = "sneakers"
```

# Booleans

If statements are evaluated from booleans being **True**

Python has 2 values of **bool** type: **True**, **False**

```
>>> 3 < 5
True
>>> 3 < 2
False
>>> 5 >= 1
True
>>> "weather" == "weather"
True
>>> "weather" == "hi"
False
>>> "weather" != "weather"
False
>>> 
```

# Relational Operators

>	Greater Than	'B' > 'A'
<	Less Than	3 < 5
>=	Greater Than or Equal To	4 >= 4
<=	Less Than or Equal To	5 <= 7
==	Equal	'Hi' == 'Hi'
!=	Does not equal	True != False

# Logical Operators

and	Two conditions has to be <b>True</b> to be <b>True</b>	<code>4 &lt; 7 and 'Hi' == 'Hi' and True</code>
or	Only one condition has to be <b>True</b> to be <b>True</b>	<code>7 &gt; 1 or 'Hi' == '3' or 4 == 4</code>
not	<b>False</b> becomes <b>True</b>	<code>not 7 &lt; 1</code>

# Functions

1. Takes input and gives an output (can be nothing!)
2. Allows us to reuse code easily

```
def star(startX, startY, length):  
    teleport(startX, startY)  
    rt(72)  
    fd(length)  
    rt(144)  
    fd(length)  
    rt(144)  
    fd(length)  
    rt(144)  
    fd(length)  
    rt(144)  
    fd(length)  
    rt(72)
```

# Loops

```
for i in range(5):  
    print(i)  
  
for i in range(1, 5, 2):  
    print(i)  
  
for i in range(10, 1, -1):  
    print(i)  
  
i = 0  
while i < 5:  
    print(i)  
    i += 1  
  
i = 1  
while i < 5:  
    print(i)  
    i += 2  
  
i = 10  
while i >= 1:  
    print(i)  
    i -= 1
```

# Array

```
arr = [1,2,3,4]
```

```
arr[0]?
```

```
arr[2]?
```

```
for i in arr:
```

```
    print(i)
```



# Fireside Chat!



How did you get started into programming?

What made you decide to pursue computer science?

How did you prepare for college?

What was your college experience like studying in CS?

What made it difficult?

What made it easy?

What's a typical “day in the life” of a software engineer (SWE)/programmer?

Any myths/expectations that are not true related to SWE/programming?

What attributes/skills makes SWEs successful?

Similarly, how can we become better at programming?

Advices for SWEs?

How has SWE role/programming changed in the last couple years?

How do you see the future of the SWE role/programming changing in the coming years?

Finally, what advice do you have for everyone pursuing programming related roles?