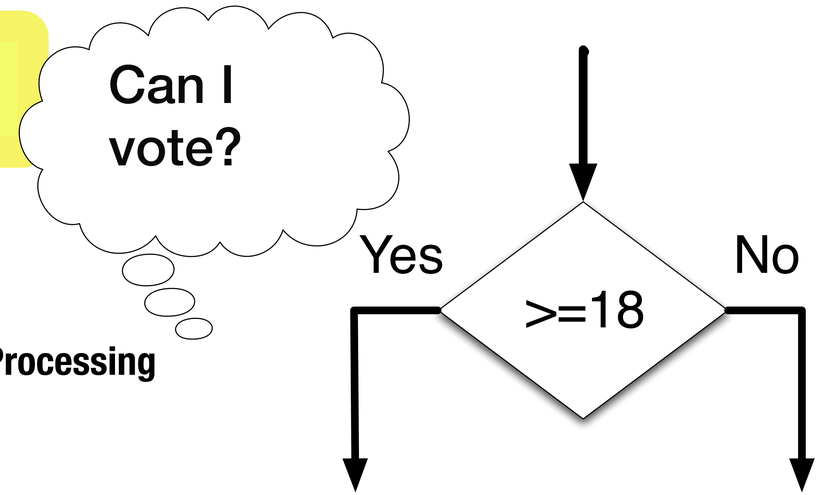
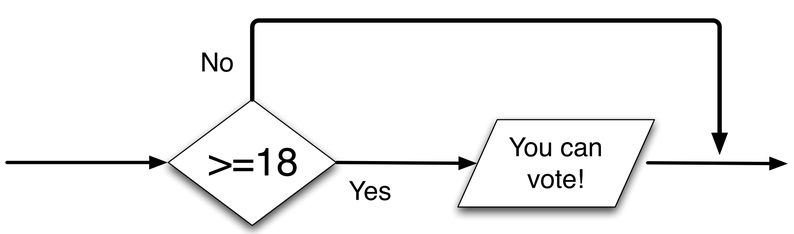
Selection: if | if/else | if/else if



if

Do one thing *or* not based on a condition.



Python

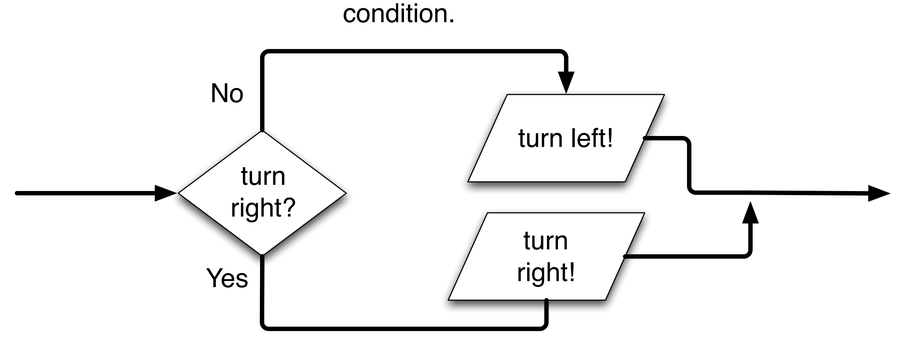
```
if turn == "right":
  print "turn right here!"
else:
  print "turn left!"
```

Java/Processing

```
if (age >= 18) {
  println("you can vote");
}
```

if / else

Do one thing or *another* based on a condition.

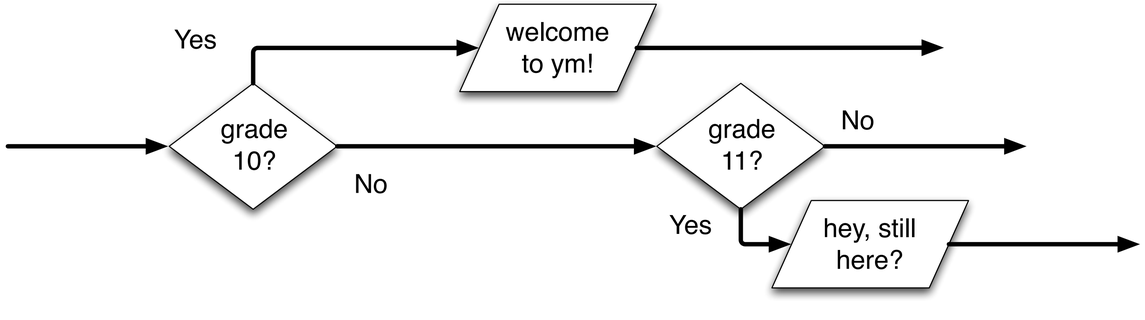



```
if age >= 18:
  print "you can vote"
```

```
if (turn == "right") {
 printon("turn right here!");
} else {
  printon("turn left!");
}
```

if / else if

Do one thing based on a condition or do another based on another condition.




```
if grade == 10:
  print "welcome to ym!"
elif grade == 11:
  print "hey, still here?"
elif grade == 12:
  print "nearly out of here!"
```

```
if (grade == 10) {
  printon("you can vote");
} else if (grade == 11) {
  printon("hey, still here?");
} else if (grade == 12) {
  println("nearly out of here!");
}
```

what is it?

Selection let's your programs do one thing or another. Without selection your program couldn't react very well to different inputs. It would be stuck doing the same thing always.

With the almighty powerful if statement your program becomes far more powerful!

example

Simply printing if someone is old enough to vote requires selection. There is no other way you can do it!

The program flow changes if a condition is met - in this case if someone is 18 or older. If this is true a message is printed - if it is not true, ie. under 18 then no message is printed.