

Questions you can ignore for
quiz 5: #10 Winter 2013
Covers up to chapter 9.

Arrays - ch. 9

array - a construct that allows us
to store many elements of a specific
data-type.

`int x = 9;`
`x = 10;` } these only store one single
value.

* Once an array is initialized, it
cannot change size.

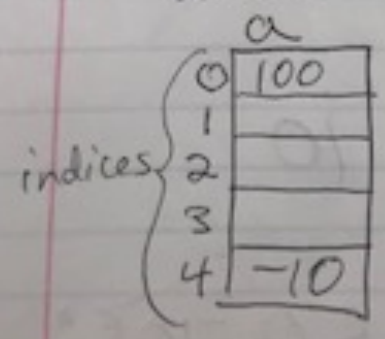
`int[] a = new int[5];`

square
braces
a

name of
array

new
keyword

how many
elements the
array is going
to store.



`a[0] = 100;`
name of array index

`a[4] = -10;`

$\overset{-10}{\underbrace{\hspace{2em}}} \quad \overset{100}{\underbrace{\hspace{2em}}}$
int z = a[4] + a[0];

println(z); // prints 90

a[1] = 5;

a[2] = 20;

a[3] = 50;

a[0] = 10;

	a
0	10010
1	5
2	20
3	50
4	-10

I can only use indices between 0 and array's length-1. Must be integers.

a[.5] = 100;

- syntax error

a[100] = 50;

- runtime error

ArrayIndexOutOfBoundsException

int z = 0;

println(a[z]); // prints 10

~~int[] a = {10, 5, 20, 50, -10};~~
int[] a = {10, 5, 20, 50, -10};

= new int[9]

int[] b = {1, 2, 3, 4, 5, 4, 3, 2, 10};

println(b[6]);

int x = b[4]; // 5

println(b[x]); // 4

x = b[7]; // 2

println(b[x]); // 3

x = b[8];

println(b[x]); // runtime error

	b
0	1
1	2
2	3
3	4
4	5
5	4
6	3
7	2
8	10

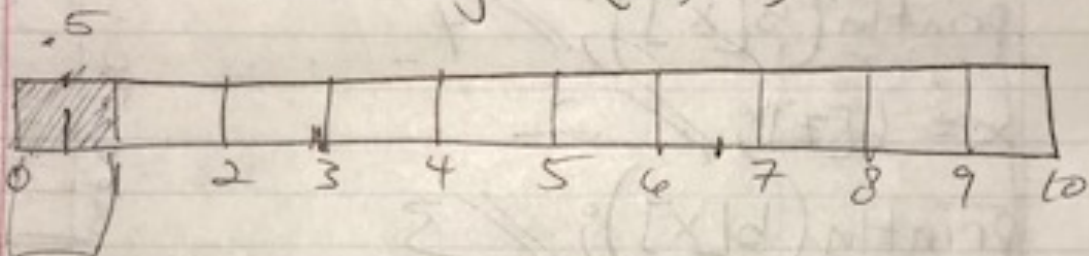
Arrays + for-loops go together very well.

b.length → 9

arrayName.length → returns the # of elements in array

if (random(10) < 1) {
fill(80);

float in the range (0, 10)



0-1

$$\frac{1}{10}$$