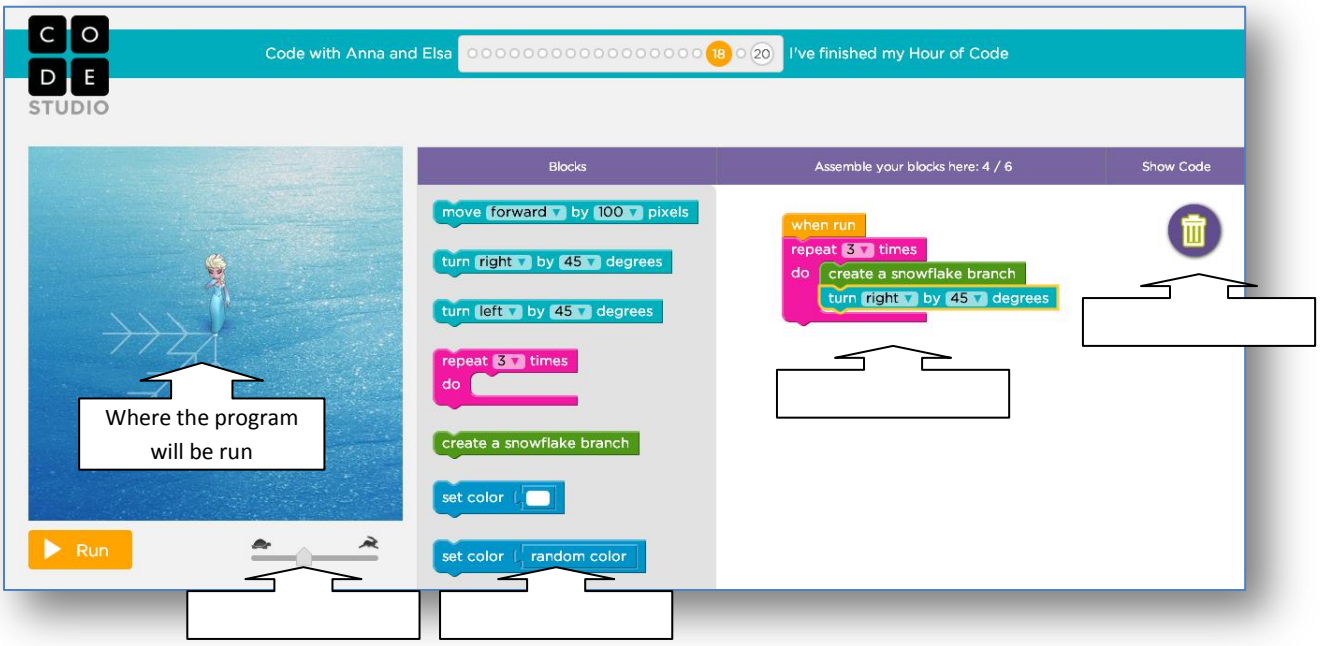
Block based programming

http://static.studio.code.org/

1- The basics of how to code

Traditional programming is usually in text, but we'll use Blockly, which uses visual blocks that you can drag and drop to write programs.

Your screen is split into three main parts:



1- Drawing snow flakes

Go on the website: http://static.studio.code.org/ and complete the puzzles. For some of them, you'll have to complete the following code (JavaScript).

Puzzle 2	Puzzle 4	Puzzle 5

`moveForward(____);`
`turnRight(____);`
`moveForward(____);`
	`for (var count = ____; count < __; count++) {`
	`  moveForward(____);`
	`  turnRight(___);`
	`}`
		`for (var count2 = ___;`
		`count2 < ___; count2++) {`
		`  for (var count = ___;`
		`count < ___; count++) {`
		`  moveForward(___);`
		`  turnRight(___);`
		`  }`
		`  turnRight(___);`
		`}`

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Puzzle 7

```
for (var count = ___; count
< ____; count++) {
  moveForward(___);
  moveBackward(___);
  turnRight(___);
}
```

Puzzle 9

```
for (var count = ___; count
< ___; count++) {

penColour(colour_random());
  moveForward(___);
  moveBackward(___);
  turnRight(___);
}
```

Puzzle 12

```
for (var count2 = ___;
count2 < ___; count2++) {
  for (var count = ___;
count < ___; count++) {
    moveForward(___);
    turnRight(___);
    moveForward(___);
    turnRight(___);
  }
  turnRight(___);
}
```

Puzzle 14

```
for (var count2 = ___;
count2 < ___; count2++) {

penColour(colour_random());
  // create_a_circle
  for (var count = ____;
count < ___; count++) {
    moveForward(____);
    turnRight(___);
  }
  jumpForward(___);
}
```

Puzzle 17

```
for (var count3 = ___;
count3 < ___; count3++) {
  // create_a_circle
  for (var count = 0; count
< 36; count++) {
    moveForward((5));
    turnRight(10);
  }
  // create_a_circle
  for (var count2 = 0;
count2 < 36; count2++) {
    moveForward((10));
    turnRight(10);
  }
  turnRight(___);
}
```

Puzzle 19

```
for (var count3 = ____;
count3 < ___; count3++) {
// create_a_snowflake_branch
  jumpForward(90);
  turnLeft(45);
  for (var count = 0; count
< 3; count++) {
    for (var count2 = 0;
count2 < 3; count2++) {
      moveForward(30);
      moveBackward(30);
      turnRight(45);
    }
    turnLeft(90);
    moveBackward(30);
    turnLeft(45);
  }
  turnRight(45);
  turnRight(45);
}
```