

Variables

A **literal** stays the same
20 is always 20

ellipse(mouseX, mouseY, 20, 20);

A **variable** changes (varies)
mouseX could be any number

<code>mouseX</code>	——	mouse position on the x axis
<code>mouseY</code>	——	mouse position on the y axis
<code>width</code>	——	width of the canvas
<code>height</code>	——	height of the canvas
<code>frameRate</code>	——	current frameRate
<code>frameCount</code>	——	for how many frames the sketch has been running

int

float

boolean

color

char

String

int

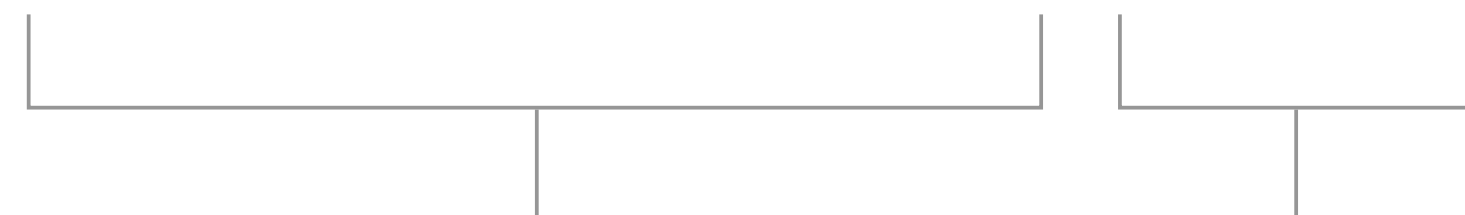
Stores whole numbers (integers)

```
int theCurrentYear = 2016;  
int aPersonsAge = 55;  
int numParticipants = 9;
```

Type	Name	Value
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```
int theCurrentYear = 2016;
```



Declaration

Assignment

float

Stores numbers with decimal points (floating point)

```
float productCost = 19.95;  
float documentHeight = 29.7;  
float pi = 3.14;
```

boolean

true or false?

```
boolean on = true;  
boolean mouseIsDown = false;  
boolean expired = true;
```


color

Stores a color

```
color red = color(255, 0, 0);  
color highlightColor = #FFFF00;  
color textColor = color(50);
```

char

Stores a single character

```
char firstInitial = 'D';  
char lastKeyPressed = 'A';  
char YorN = 'N';
```

String

Stores a 'string' (sequence) of characters i.e. text

```
String name = "Dan";  
String message = "Hello!";  
String content = "It was the best of times, it
```

Operators

+ Add

- Subtract

* Multiply

/ Divide

++ increment (Add one)

-- decrement (Subtract one)

+ Addition

```
int apples = 4;  
int oranges = 6;  
int fruits = apples + oranges;
```

- Subtraction

```
int purchased = 100;  
int sold = 25;  
int inventory = purchased - sold;
```

* Multiplication

```
float price = 19.99;  
float unitsSold = 25;  
float revenue = unitsSold * price;
```


/ Division

```
int miles = 80;  
int hours = 3;  
int speed = miles / hours;
```

++ Increment

```
int age = 55;  
age++;  
println(age); // 56
```

-- Decrement

```
int sessions = 10;  
sessions--;  
println(sessions); // 9
```