CHEAT SHEET {👤}

Variable types

int	positive / negative integers
double	positive / negative decimal numbers
char	one single character
string	more than one character
bool	values can be only true or false

Constant values (Literals)

int	123
double	123.456
char	'A'
string	"ABCDEFGH"
bool	true false

Conditional operators

<	less than
<=	less than or equal
==	equal
>=	greater than or equal
>	greater than
!=	not equal

Logical operators

&&	AND
||	OR
!	NOT

while loop

```
while (condition1)
{
    // run statement until condition1
    // becomes false
}
```

Arithmetic operators

+	add	-	subtract
*	multiply	/	divide
++	increment	--	decrement

for loop

```
for(int i = 0; i < condition; i++)
{
    // repeat statements until condition
    // becomes false
}


for(int i = 0; i < condition1; i++)
{
    for(int j = 0; i < condition2; j++)
    {
        // repeat statements j * i times
    }
}
```

Conditional statement

```
if (condition1)
{   // statements to run, if condition1 is true
}
else if (condition2)
{   // statements to run, if condition2 is true
}
else
{   // Run statements if no previous conditions
    // was true
}
```

## Class

```
class ClassName
{
    // Constructor
    public ClassName(/*Parameters*/)
    {   // statements automatically executed,
        // when instance created
    }
    public int MethodName(/*Parameters*/)
    {
        return 10;
    }
}


ClassName theClass;    // declare variable

theClass = new ClassName (/*Arguments*/);
theClass.MethodName (/*Arguments*/);
```

Coder for C#

## Basic shapes

Point (x, y)

x, y
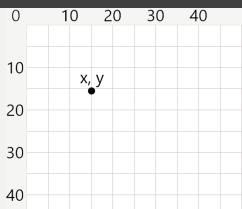
Line (x₁, y₁, x₂, y₂)

x₁, y₁

x₂, y₂
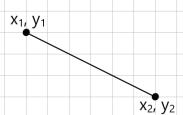
Rect (x, y, width, height)

x₁, y₁   height   width
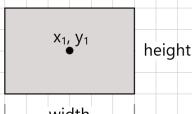
Ellipse(x, y, width, height)

x₁, y₁   height   width
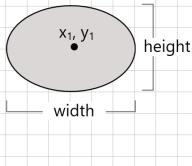
Shape attributes

Fill (color)	set the fill color
NoStroke ()	paint no stroke
Stroke (color)	set the color
StrokeWeight(weight)	set the line width

Color

|		
Fill (0)	**Fill** (128)	**Fill** (255)
Fill (255, 0, 0)	**Fill** (0, 255, 0)	**Fill** (0, 0, 255)
Fill(255,0,0,255)	**Fill**(255,0,0,156)	**Fill**(255,0,0,65)
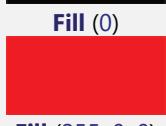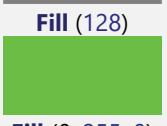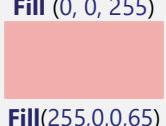
Canvas settings

Background (color)	erase the canvas with the color
EllipseMode (mode) EllipseModes.Center EllipseModes.Corner	location of the anchor point
RectMode (mode) RectModes.Center RectModes.Corner	location of the anchor point
PrintLn ("Hello") **PrintLn** (Width)	write text to the console to find errors

Text

Hello

TextSize (32)	set the font size
TextFont ("Cookie")	set the font
Text ("Hello")	draws text to the canvas

Canvas variables

```
1 Timer = Draw;
2
3 void Draw()     Timer
4 {
5     Background(234);
6 }
```

Draw

MouseY

MouseX

Height

Width
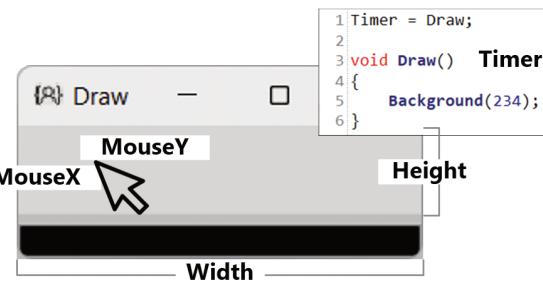
Input variables

MouseIsPressed	true, if any mouse is pressed
KeyIsPressed	true, if any key is pressed
Key	pressed key of type char
KeyCode	code for non-visible character of type KeyCodes

Math methods

Random(0, 100)	returns a random number between min and max
Dist (0,0, 100, 0)	calculates the distance between two points

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