WELCOME TO

TECHNOVATION

Week 8: November 12th

MICHIGAN STATE UNIVERSITY

Agenda

- Helpful Project Lesson
  - Advanced circles
  - Making your own colors
- Continuing Final Projects
- Temperature Check

Tracy Command: Advanced circle

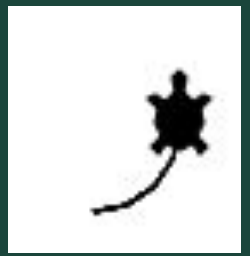
`circle(radius,extent,steps)`

Determines degrees of circle

`circle(25,360)`

`circle(25,180)`

`circle(25,90)`



Tracy Command: Advanced circle cont.

`circle(`*`radius`*`,`*`extent`*`,`*`steps`*`)`

Determines number of points in circle

`circle(25,360,3)`

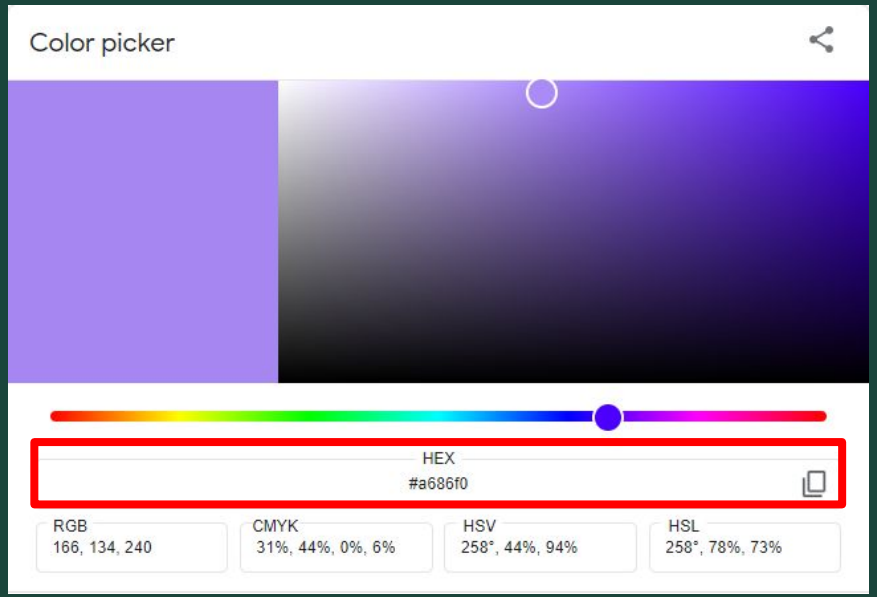
`circle(25,360,5)`

`circle(25,360,50)`

Tracy Command: Custom Color

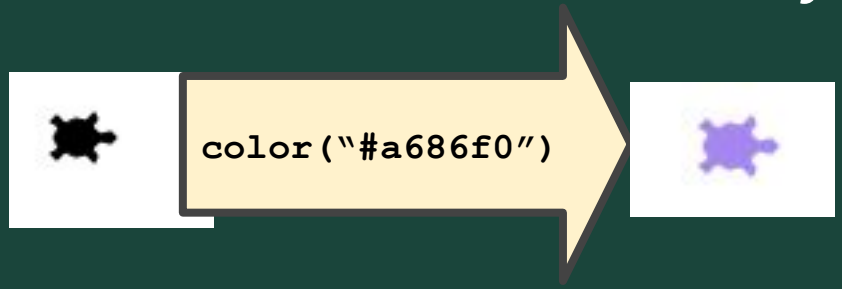
Tracy can use a lot more colors than you think

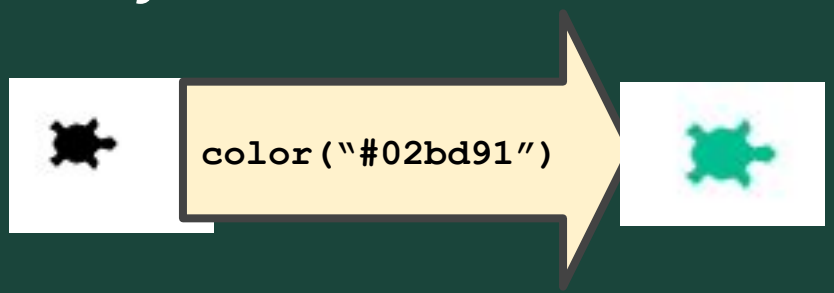
She can use Hex Colors as well

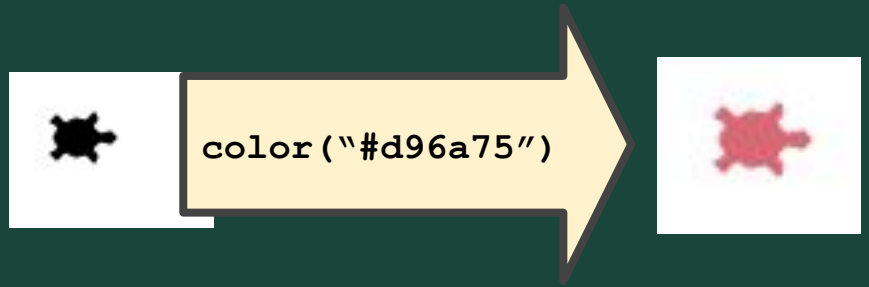


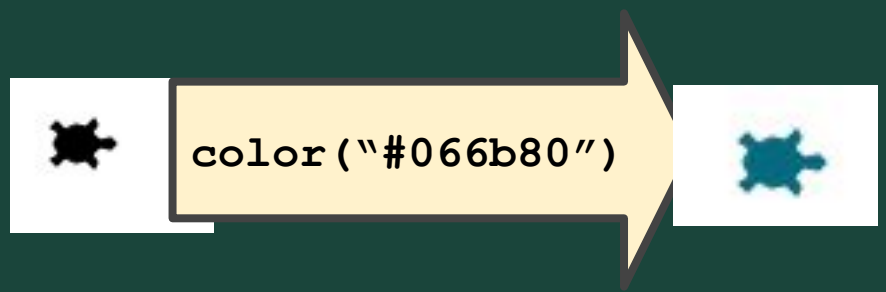
Tracy Command: Custom Color cont.

By putting the hex color into the color command
You can use any color you can find!









Final Project: Overview

- What The Last Three Weeks Look Like:
  - ~~Week 7: Brainstorm, Plan and Design. Submit our Final Project Outlines at the end of the meeting~~
  - Week 8: Code, Code, Code!
  - Week 9: Present our Final Projects
- Project requirements:
  - Must have so many shapes/colours, but this is a chance for you to have creative freedom
  - Make sure you can finish it in time! You can also work on it at home or during Bonus Hours. If you finish early you are welcome to make a second project
- Ask questions!
  - Don't be afraid to code outside the box! If there is something you don't know how to do, let us know and we will help you add it
- Save your work!
  - It's a great habit to constantly click that 'Save' button. Because we aren't submitting it each time, CodeHS will not automatically save your work

Ready, Set, CODE!

Command	What does it do?
`name = value`	Saves the value in the variable
`input("prompt")`	Prints prompt and waits for user input
`int(...), float(...)`	Converts a value to a number (`int` or `float`)
`for i in range(number)`	Initialize a loop
`def function_name():`	Declares a function
`function_name()`	Calls a function

Command	What does it do?
`color("color name")`	Changes Tracy's trail color
`pensize(number)`	Changes Tracy's trail thickness
`begin_fill()`	Starts tracking closed shapes
`end_fill()`	Fills & stops tracking closed shapes
`setposition(x, y)`	Moves Tracy to the input coordinates
`speed(number)`	Sets how fast Tracy executes commands
`name = value`	Saves the value in the variable
`input("prompt")`	Prints prompt and waits for user input
`int(...), float(...)`	Converts a value to a number (`int` or `float`)

Command	What does it do?
`forward(distance)`	Moves Tracy forward a specified ***distance***
`circle(radius)`	Draws a circle with a specified ***radius***
`backward(distance)`	Moves Tracy backward a specified ***distance***
`penup()`	Stops Tracy from leaving a trail
`pendown()`	Has Tracy start drawing a trail
`left(num)`	Turns Tracy ***num*** degrees to the left
`right(num)`	Turns Tracy ***num*** degrees to the right

Standup

- How did coding your final project go today?
- How’s your final project looking?
- How much left do you have to do for your project (give us a % of how much you have left)

Temperature Check

- Temperature Check