



Code a Code!

Send a secret message using the Touch LED.

Step by Step

1. In this project, you are going to create a code by assigning flashes of the Touch LED to alphabet letters. For example, "A" = 1 flash of red, "B" = 2 flashes of green, "C" = 1 flash of blue and 1 flash of red. Make sure you pause in between each letter, so it does not get confusing.
2. For this activity, you will need a robot Brain and a Touch LED. Open VEXcode IQ and configure the Touch LED.
3. Build the code shown in the image to the right.
4. Download and run your project. Write out the letters that the Touch LED indicates. The project should have spelled out the word "CAB."
5. Now, develop and write your own code and create a project that uses the Touch LED to spell out a short word of your choosing. Create a key to give to another person and see if they can figure out the word you spelled when they watch your project run.

```
# Begin project code
# Shine C
touchled_3.set_color(Color.BLUE)
wait(1, SECONDS)
touchled_3.set_color(Color.RED)
wait(2, SECONDS)

# Turn Off
touchled_3.set_color(Color.BLACK)
wait(1, SECONDS)

# Shine A
touchled_3.set_color(Color.RED)
wait(2, SECONDS)

# Turn Off
touchled_3.set_color(Color.BLACK)
wait(1, SECONDS)

# Shine B
touchled_3.set_color(Color.GREEN)
wait(1, SECONDS)

# Turn Off
touchled_3.set_color(Color.BLACK)
wait(1, SECONDS)
```

'LEVEL UP'

- **Sound off!**- To help understand when a letter is complete, program the BaseBot to make a sound after completing the flashes of a letter.
- **Sentence Sleuth**- Assign words to your code instead of letters and see what sentences you can create.

Pro Tips

- To turn the Touch LED off, set the color to

Color.BLACK

Standard: CSTA 1A-AP-09- Model the way programs store and manipulate data by using numbers or other symbols to represent information.