

**AP CSP Python with Robots
Mission 3 Obj 1-6 Assignment**

Name:

Mission 3 Introduction

Read the introduction and project goals. During this assignment, you will complete the first three goals.

Mission 3 Objectives 1-6

Complete Objective 1. After running the code, answer these questions:

Can you see each LED turn on in sequence? Do you think they come on at exactly the same time?

Answers will vary

Complete Objective 2. You will use the debugger. The goal is met after just one “step in,” but you should keep clicking to the end. Then press the STOP button.

Complete Objective 3. What do you have to do before you can use the sleep() function?

What amount of time is 1.0?

from time import sleep

1 second

Complete Objective 4.

What is a literal?

What is a variable?

Click on Variable and Assign to add them to your toolbox.

Literal: A specific value, like 1.0

Variable: A name to which you assign some data.

Complete Objective 5. You can delete the # TODO comment when you type in the actual code.

Submit your code to the teacher.

After Objective 5, submit your **SequenceLEDs** program to the teacher.

Complete Objective 6. Click on Binary to add it to the toolbox. Spend some time reading about binary.

To control LEDs using binary, what code do you use? How do you designate a binary number?

Learn more about the code by clicking on the CodeBot LEDs tool.

Use leds.user(0b00110011) instead of leds.user_num(1, True)

You designate a binary number with 0b

After Objective 6, submit your **BinaryLEDs** program to the teacher.