

<b>Mission 9 Assignment</b>	<b>Name:</b>
<b>Pre-Mission Preparation</b>	
In previous missions, you used a list to hold multiple related values. What do you remember about lists:	
<b>Mission 9 Checks</b>	
Objective #1 What data type is used to turn on the line sensor LEDs?	
Objective #2 List at least three things you can do in REPL:	
Quiz: List comprehensions and Tuples The command <code>ls.check()</code> returns a tuple. Open the toolbox and learn more about tuples. How do you define a tuple? How do you index an item in a tuple?	
Objective #3 What is the algorithm for the bang-bang controller:	
Objective #4 What code do you need to check if the CodeBot is on a line?	
Objective #5 <code>prev_vals = None</code>   What does <b>None</b> mean? (Click on the word to open the toolbox.)	
What is the code to print only if <b>vals</b> has changed?	

<p>Objective #6 What is the structure of a dictionary?</p> <p>What code will lookup a value in a dictionary?</p> <p>What happens if a key is not in the dictionary?</p>	
<p>Objective #7 What method is used to get a value while avoiding a KeyError?</p>	
<p>Objective #8 What does "PID" stand for?</p> <p>When does an UnboundLocalError occur?</p> <p>How do you eliminate the error?</p>	
<p>Objective #9 What constants did you need to modify to run the course?</p>	
<p><b>Post-Mission Reflection</b></p>	
<p>Discuss a problem you had with the program. How did you overcome the problem?</p>	
<p>You learned a lot about line sensors during missions 7, 8 and 9. Think of a non-electronic device that would be really cool if it had some kind of line sensing. Describe how it would work:</p>	