

# Debugging Challenge – A Bug in the Ferris Wheel



**Explore** – Check out [The Spinning Ferris Wheel](#) lesson. Build the model and practice coding. Then, try this debugging challenge!

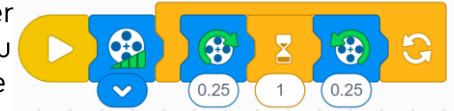


**Debug** – A bug is an error in a program that doesn't allow it to function properly. Debug means to identify and fix the error in a program.

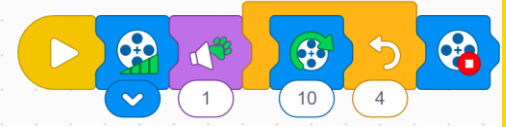


**Extend** - Develop a code and intentionally include a bug. Show your code to a classmate or friend to see if they can debug the program.

**Challenge 1:** In this program, the Ferris wheel should rotate, pause for a passenger to get on, then continue rotating. Can you spot the error? How would you modify the code to create a successful program?



**Challenge 2:** This program should play a fun song for passengers while they ride the Ferris wheel for 10 full rotations. Can you debug and modify the program to create a fun experience?



**Challenge 3:** Add the color sensor to collect riders' tickets. A red ticket gives a rider one rotation on the Ferris wheel. A blue ticket gives the rider four rotations. Neither ticket color works properly! Can you find and fix the bugs?

