Turtle Race Code Detective

Analyze and improve Python turtle racing code!

Name: _____ **Date:** _____

Mission Objective

You're analyzing the improved Turtle Race code from The Pi Academy repository. Study the code in done/02-improved.py and answer the questions below!

Repository Info

GitHub: https://github.com/The-Pi-Academy/turtle-race | **File:** done/02-improved.py | **Features:** 11 colorful turtles, winner detection, victory celebration

How many turtle colors are available? ANALYZE

_____

Count the colors in the colors list!

What does create_turtle() function do? UNDERSTAND

Find the function definition.

Step range: Original 1-5, Improved? COMPARE

_____ to _____

Look for random.randint() in race loop.

3 configuration variables: IDENTIFY

1. _____
2. _____
3. _____

Variables storing important numbers.

How is the winner determined? TRACE

Check turtle positions after race loop.

Add "lime" color - what code? MODIFY

Where is the color list defined?

How many dashes per lane in improved track? ENHANCE

_____ dashes

Look for range() function in track drawing section.

What happens to winning turtle after race? ANALYZE

_____

Find the winner celebration section.

Code for 25% faster race (change speed range): CHALLENGE

Current: 1-15. Calculate 25% faster.

New feature to make race more exciting: DESIGN

Think: sound effects, obstacles, power-ups?

Excellent detective work! You've analyzed professional Python code improvements.

Next: Try running the code and making your own modifications!

Bonus: Clone the repository and implement your new feature from question 10!