

Turtle Graphics Program

Description

The Turtle Graphics program is a creative drawing application that uses the turtle graphics library to simulate a turtle moving on a floor of 20x20 squares. The turtle can be controlled with various commands to draw lines and shapes on the screen. This program allows users to interactively control the turtle's movement and drawing actions.

Key Features:

- **Move Forward:** Command the turtle to move forward by a specified number of steps.
- **Turn Left/Right:** Turn the turtle left or right by a specified angle.
- **Pen Up/Down:** Lift or drop the pen to start or stop drawing.
- **Interactive Commands:** Accept commands from the user to control the turtle.
- **Draw Shapes:** Use commands to draw various shapes like squares, triangles, etc.
- **Grid Visualization:** Display a grid to help visualize the turtle's movements.

How to Use:

1. **Run the Application:** Start the application using your Python environment.
2. **Initialize Turtle:**
 - **Screen Setup:** Set up the screen size and background color.
 - **Turtle Initialization:** Create and configure the turtle object.
3. **Accept Commands:**
 - **Move Forward:** Enter the number of steps the turtle should move forward.
 - **Turn Left/Right:** Enter the angle to turn the turtle left or right.
 - **Pen Up/Down:** Enter commands to lift or drop the pen.
4. **Draw Shapes:**
 - **Predefined Shapes:** Use commands to draw predefined shapes.
 - **Custom Shapes:** Combine commands to draw custom shapes.
5. **Visualize Grid:**
 - **Draw Grid:** Display a grid to help visualize the turtle's movements.
 - **Adjust Grid Size:** Configure the grid size according to the screen dimensions.
6. **Exit:** Provide a command to exit the application and close the screen.