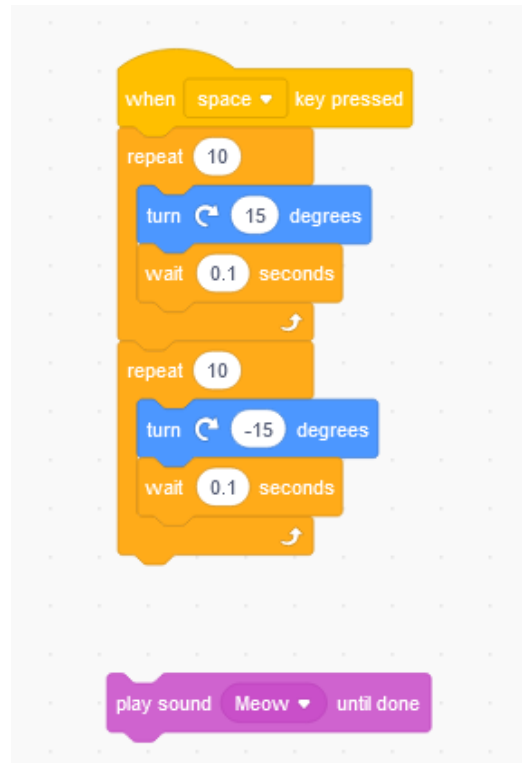


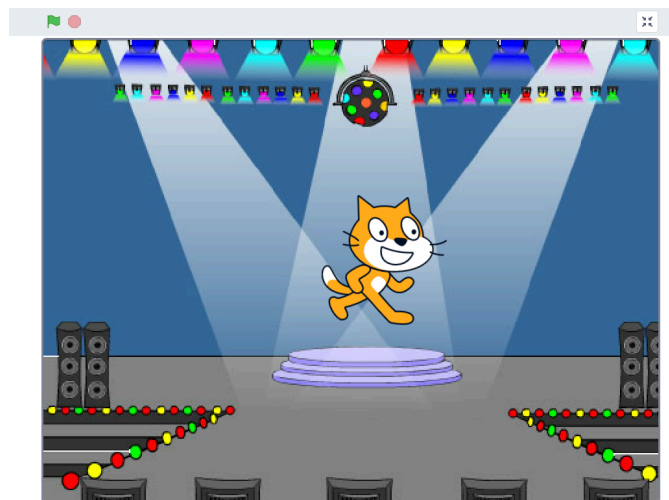
1. Design a Scratch application to empty coke bottle.

Solution - The application will simulate an animated Coke bottle being emptied. It will use sprites and coding blocks in Scratch to create the illusion of the liquid pouring out of the bottle and the bottle becoming empty.

Code



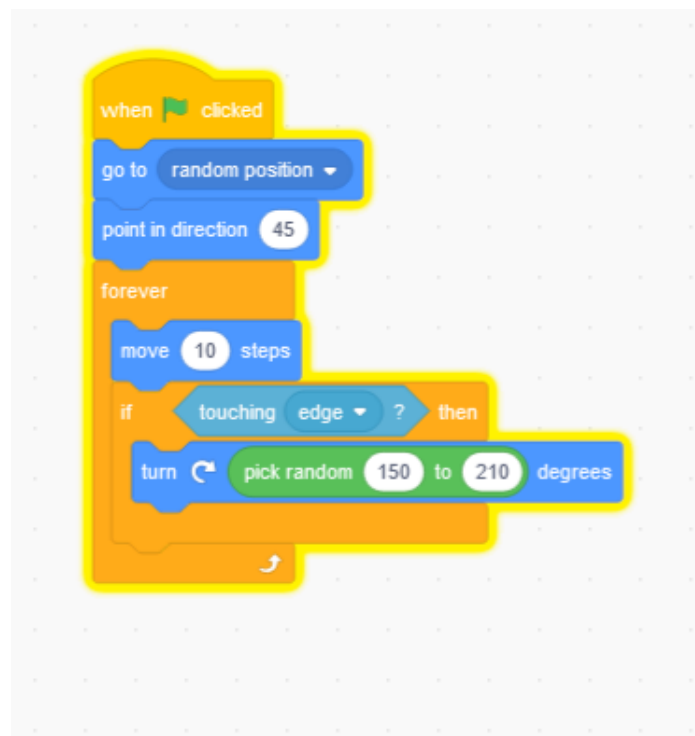
Output-



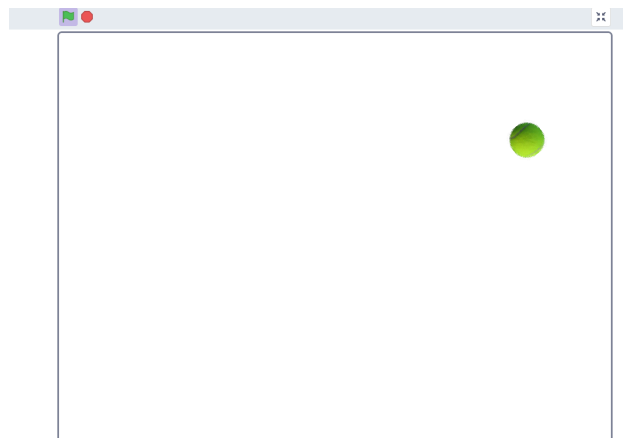
2. Design a Scratch application to bounce a ball.

Solution - The application will simulate a ball bouncing within a defined area. When the ball hits the edge of the screen or a specified object (like a paddle), it will bounce back at an appropriate angle.

Code



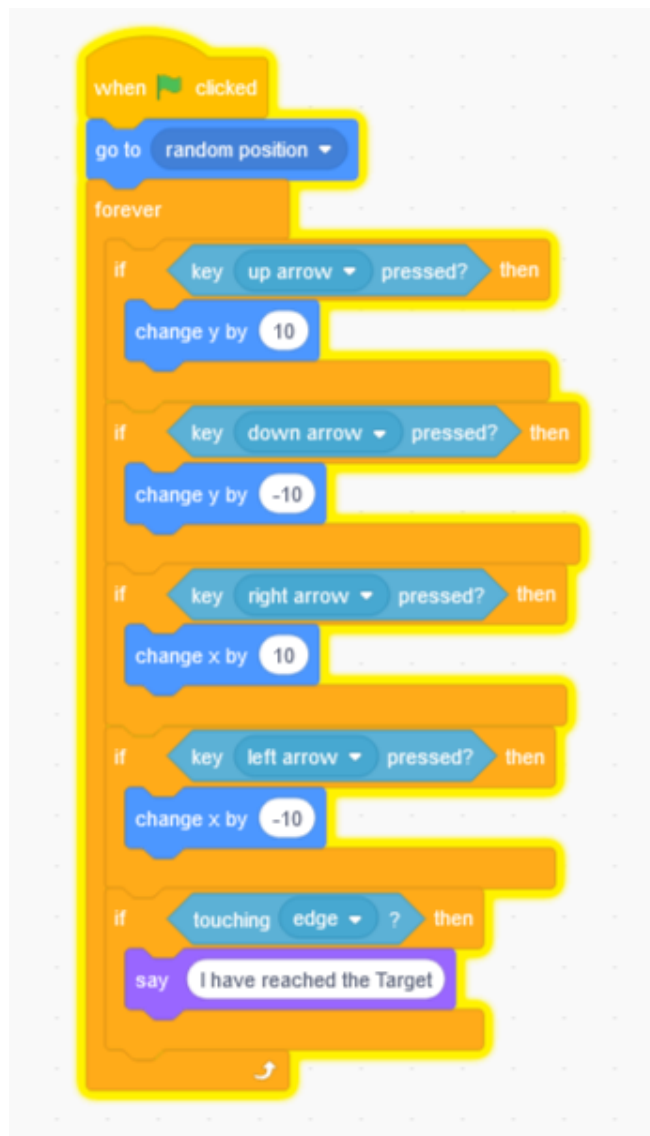
Output-



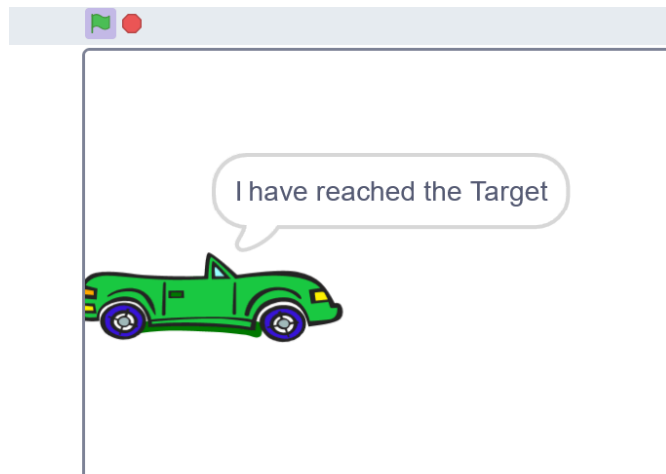
3. Design a Scratch application to move the object from one location to another.

Solution - The application will feature an object (sprite) that can be moved to a specific target location using keyboard inputs, mouse clicks, or automatic animations.

Code-



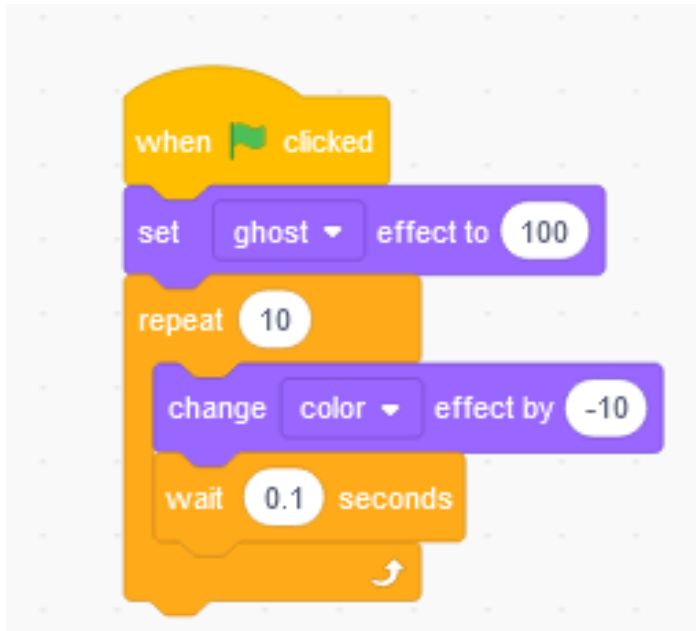
Output-



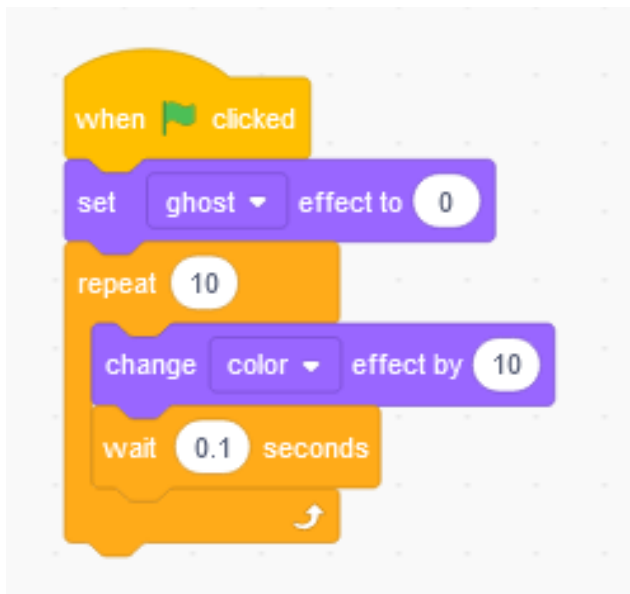
4. Design a Scratch application to display fade-in and fade-out applications.

Solution - The application will display a sprite that gradually appears (fade-in) and disappears (fade-out) using the "ghost" effect in Scratch.

Code - 1) Fade-In Effect:

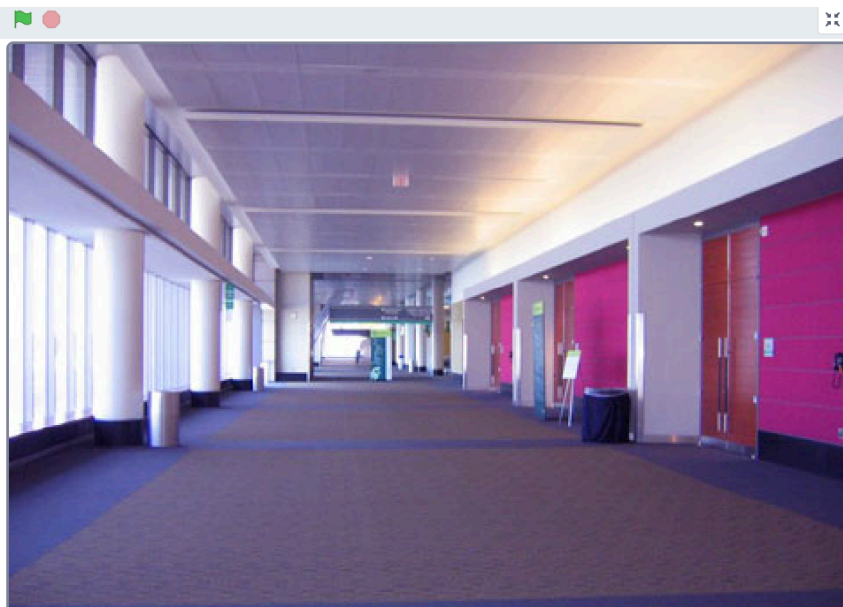


2) Fade-out Effect:



Output-

1) Fade-In Effect:



2) Fade-out Effect:

