

Scratch Invaders



Register/login at <https://scratch.mit.edu>

Make the invaders line dance in a row.



1) Download *invader* images from:

<https://codeclub67.github.io/images/invader.gif>

2) Create a new sprite by uploading the *invader* images.

To make all the invaders dance together, they need a clock to keep them in time.

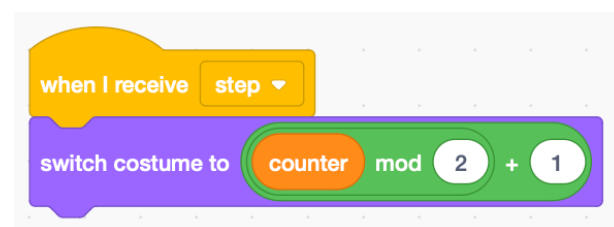
3) Add code to the **stage** that beats out the **steps**, and keeps count (make a **counter** variable, available to all).



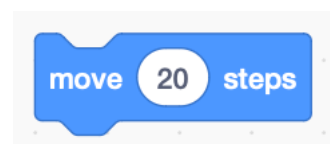
Look at the costumes and choose a pair of the same colour starting at 1, 3 or 5.

4) Add code to the Invader sprite to **switch costumes** based on the counter. **Counter mod 2** is 0 or 1 for even and odd counts

(the remainder after dividing by 2). Add this to your chosen costume number (1, 3, or 5).



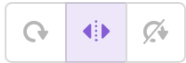
5) Add code to make it **move**.





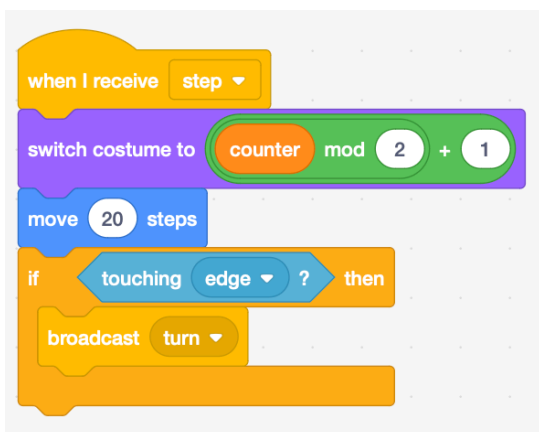
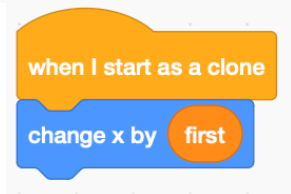
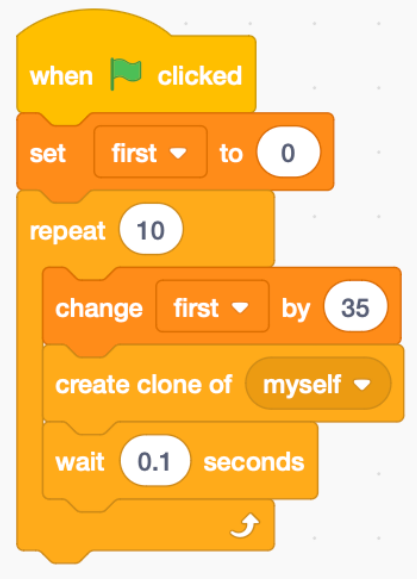
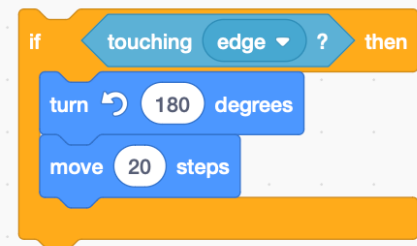
If your invader walks off-screen, get it back by changing x (in the sprite controls) to zero.

6) Add code to detect the **edge** and **turn** the invader around 180°, and set the invader Direction to *reflect*.

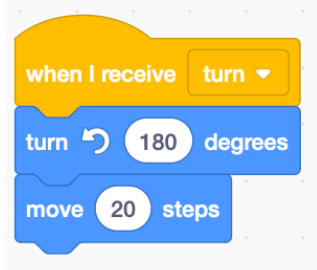


7) Instead of making ten new sprites, **clone** the one you have. Create a variable **first** to position invaders on this first row (you can add more).

Place your invader to the left of the screen and try it! See how they pile up at the edge – now make them all turn at once.



8) Change the code in the **if** to **broadcast** a turn instruction instead.



9) Add code to **receive** the turn instruction

*Try adding another row (change **first** to **second**, or **third** row)
Remember to **Save** your code.*