



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.

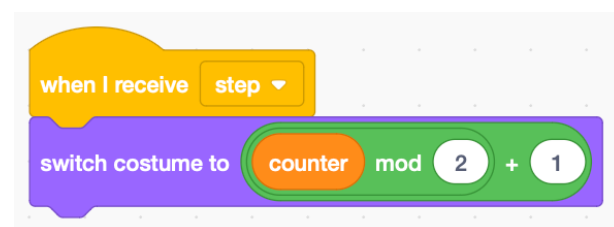
3) Add code to the **stage** that beats out the **steps**, and keeps count (make a **counter** variable, available to all).



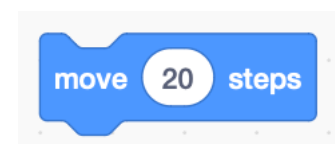
Look at the costumes and choose a pair of the same colour starting at 1, 3 or 5.

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**.



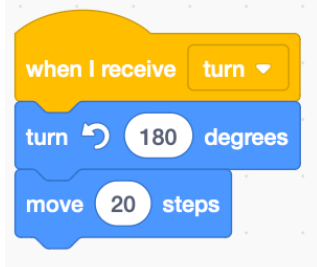
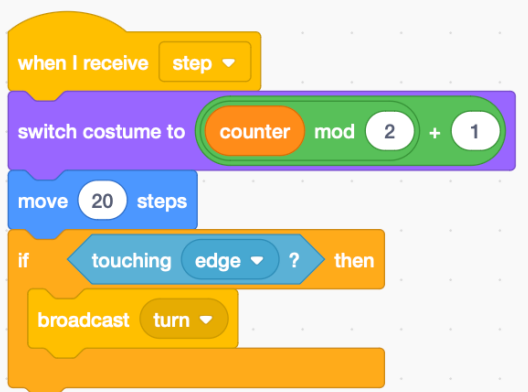


If your invader walks off-screen, get it back by changing x (in the sprite controls) to zero.

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 rows).

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.*