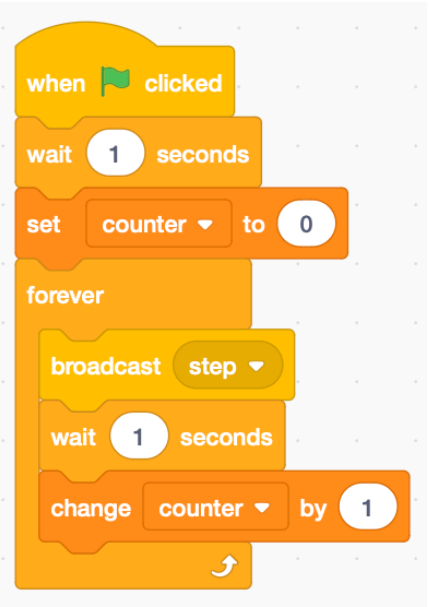
Scratch Invaders 1

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

Make the invaders shuffle left and right in a row.

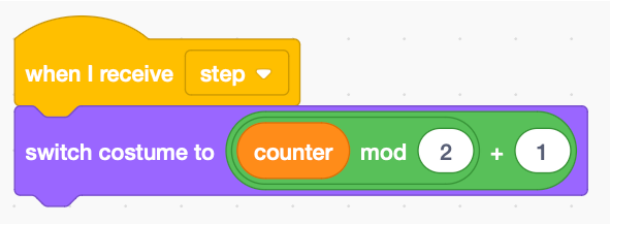
1) Download *invader* images from: https://codeclub67.github.io/images/invader.gif
2) Create a new sprite by uploading the *invader* images.

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

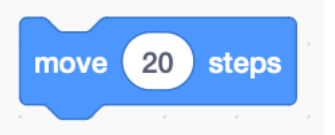


3) Add code to the **stage** that beats out the **steps**, and keeps count (make a **counter** variable, available to all).

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).

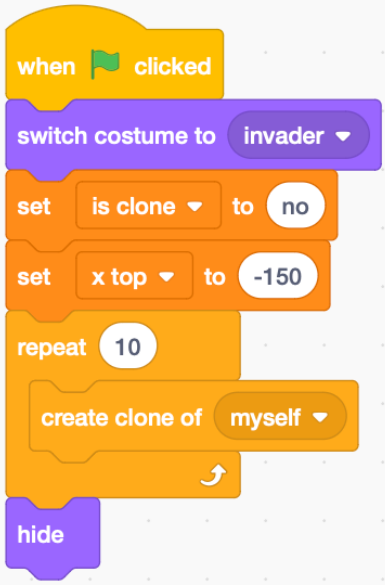


5) Add code to make it **move**.

If your invader walks off-screen, get it back by changing x to zero.

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

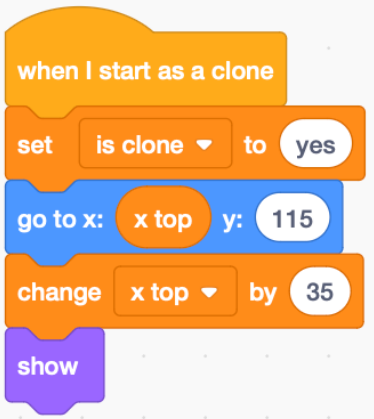
Instead of making more sprites,
***clone** the original and then hide it.*



7) Create a **local** variable (this sprite only) to tell if a sprite **is clone** (‘yes’ for clones)

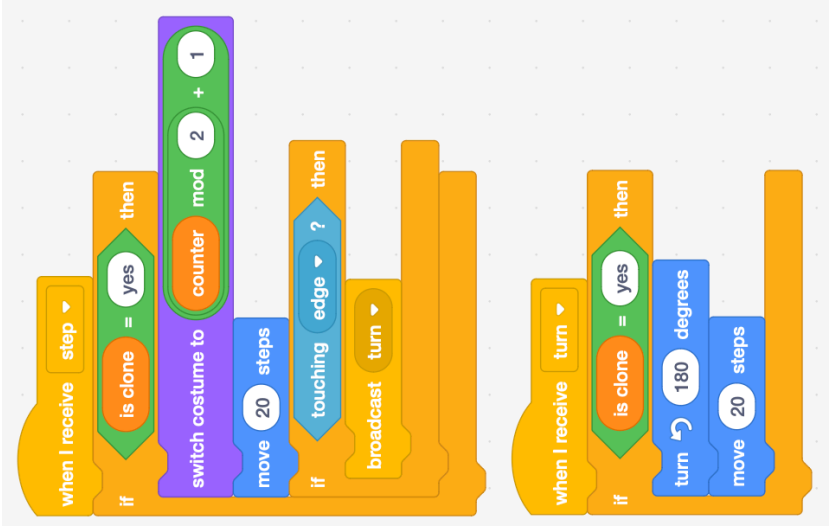
8) Create a **global** variable (for all sprites) **xtop** to position invaders on this top row.

Try it! See how they pile up at the edge – now make them all turn at once.



9) Change the **step** code, as below, to **broadcast** a turn instruction instead.

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



*Try adding another row (modify **x top** and the y coordinate)*

*Remember to **Save** your code.*