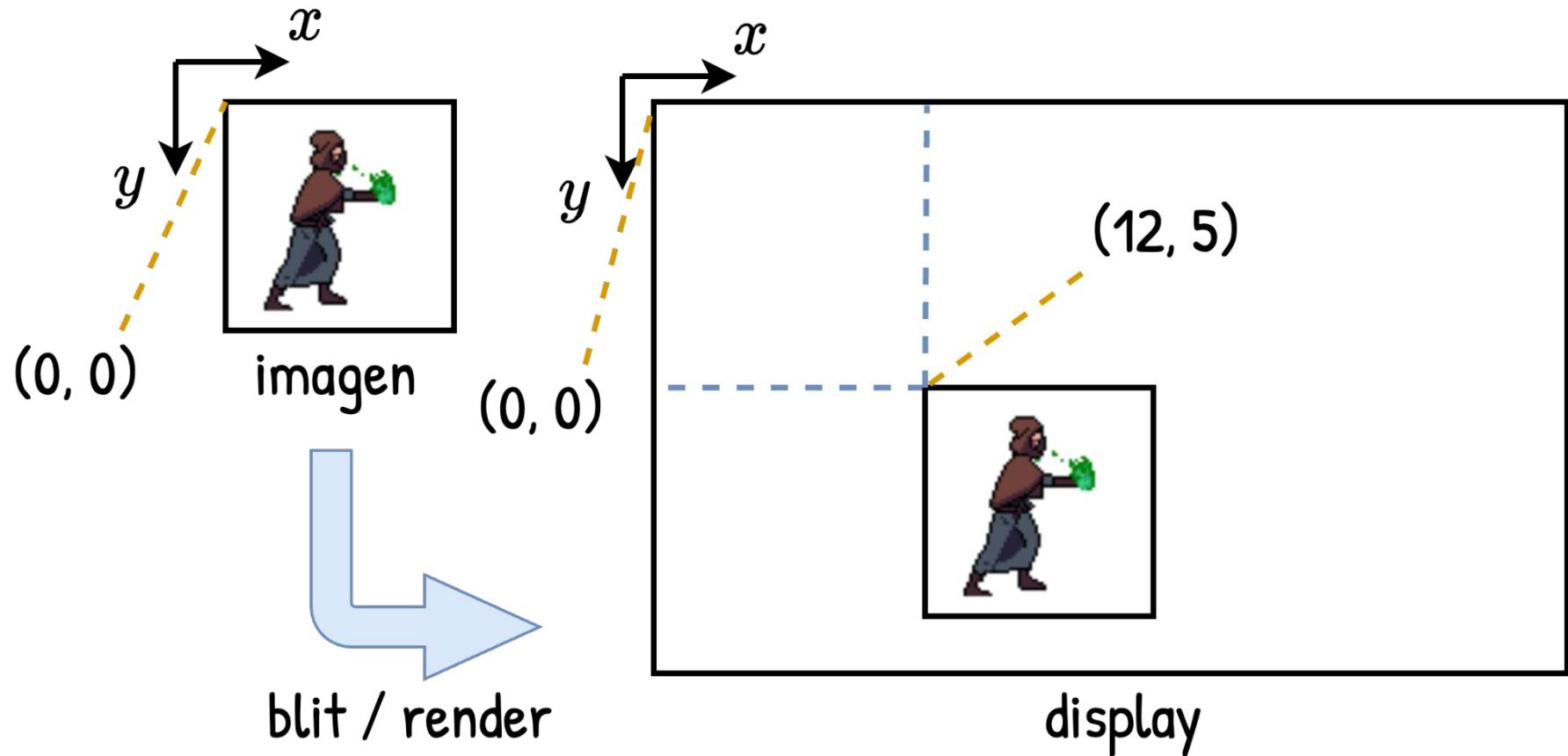


Interfaz gráfica (intro)

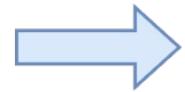
Martin Di Paola

Facultad de Ingeniería
Universidad de Buenos Aires

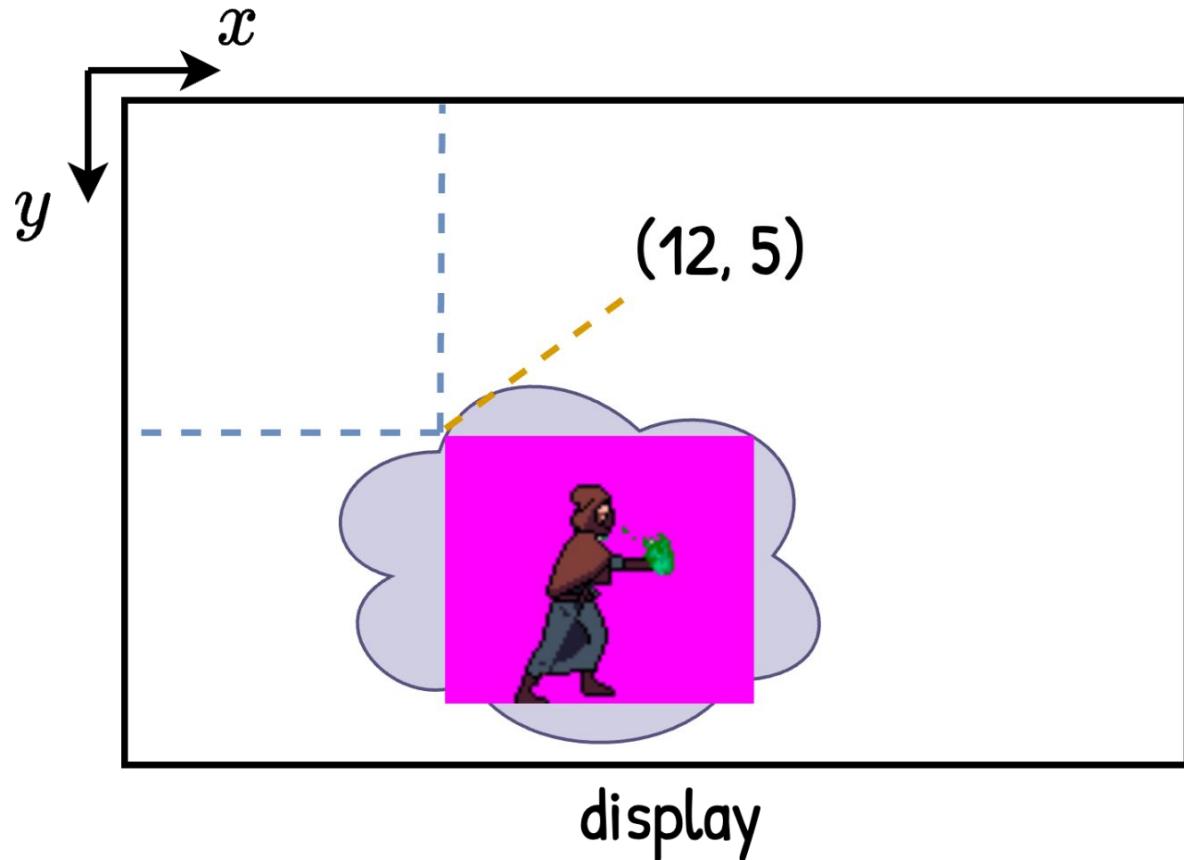
Imagenes (src & dst)



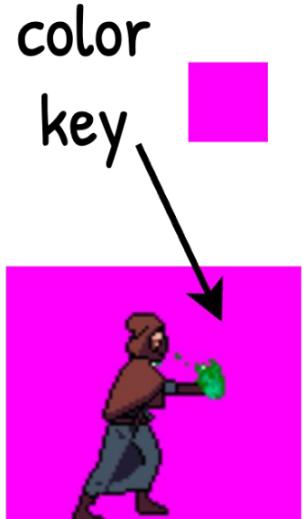
Las imágenes son matrices



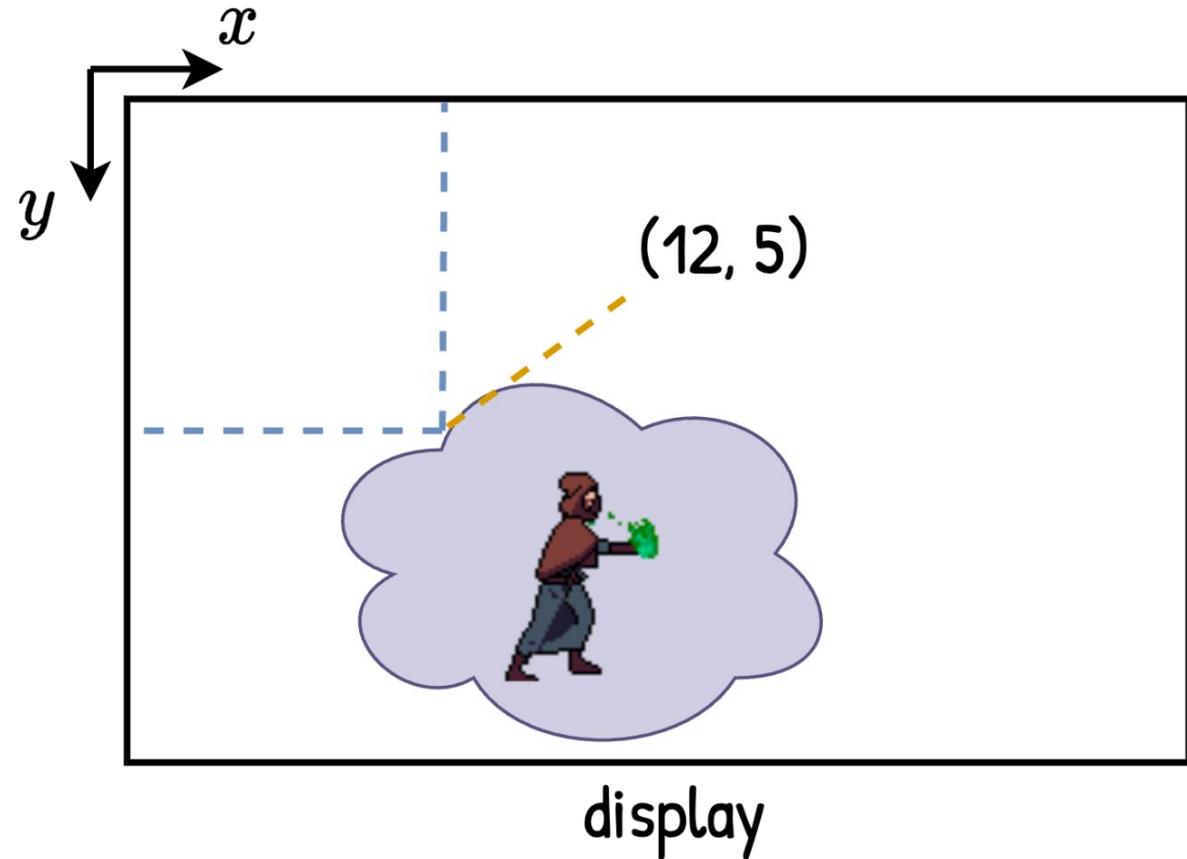
blit /
render



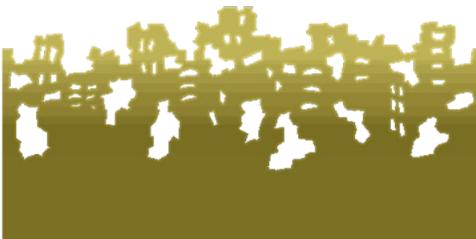
Color key



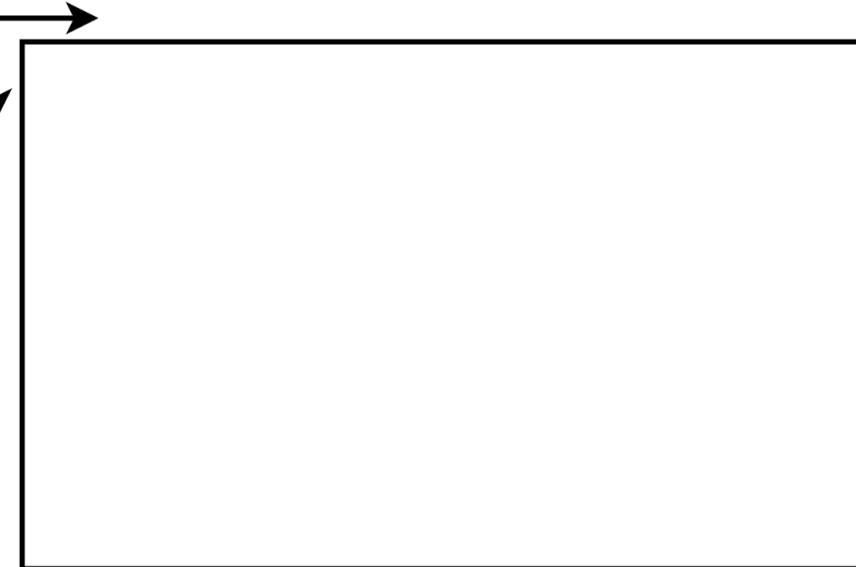
blit /
render



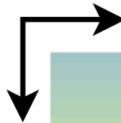
Composición de la escena (renderizado del frame)



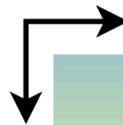
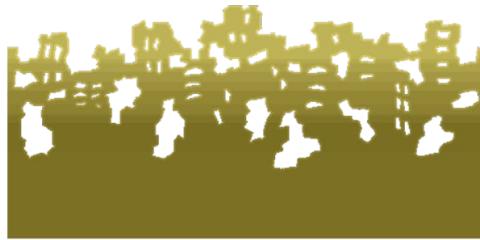
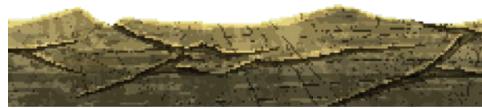
????



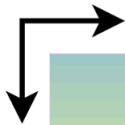
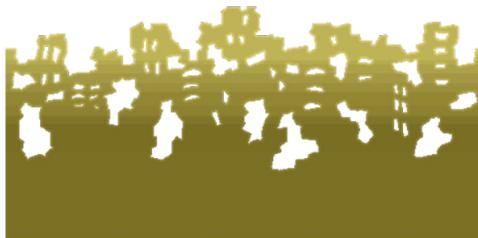
Algoritmo del pintor (aka: renderizar del fondo hacia adelante)



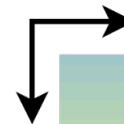
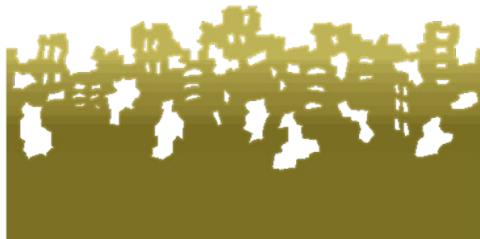
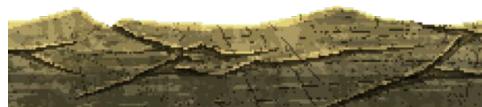
Algoritmo del pintor (aka: renderizar del fondo hacia adelante)



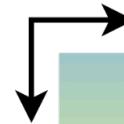
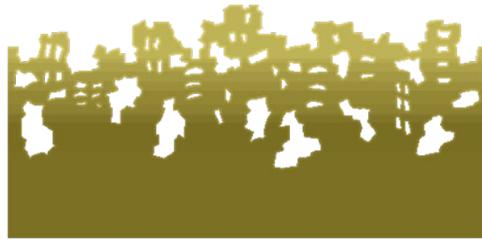
Algoritmo del pintor (aka: renderizar del fondo hacia adelante)



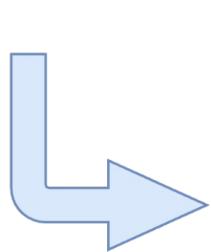
Algoritmo del pintor (aka: renderizar del fondo hacia adelante)



Algoritmo del pintor (aka: renderizar del fondo hacia adelante)



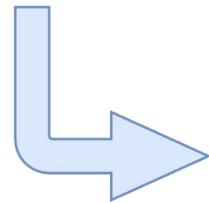
Movimiento de una imagen / actualización del escena



????



Clear



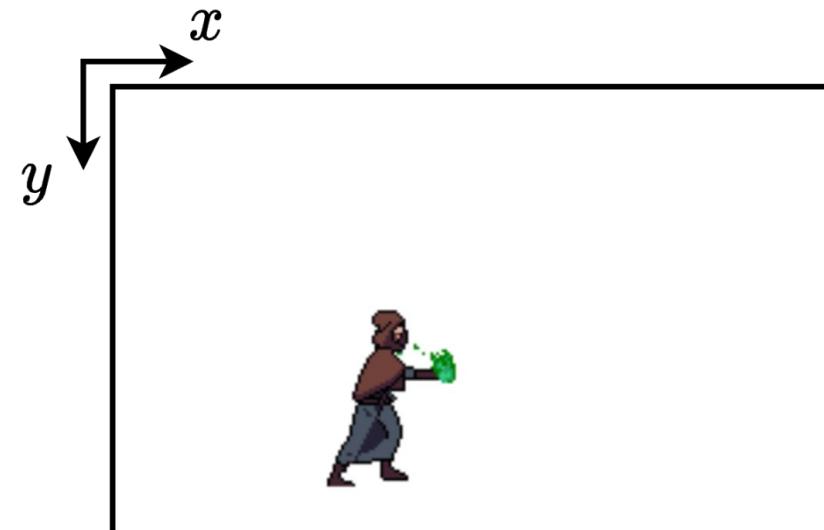
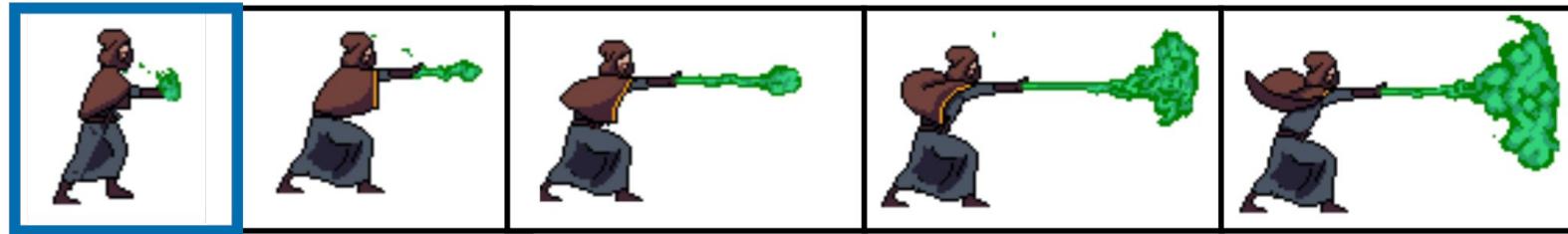
clear / fill



Main loop

Animaciones

$i_x = 0$



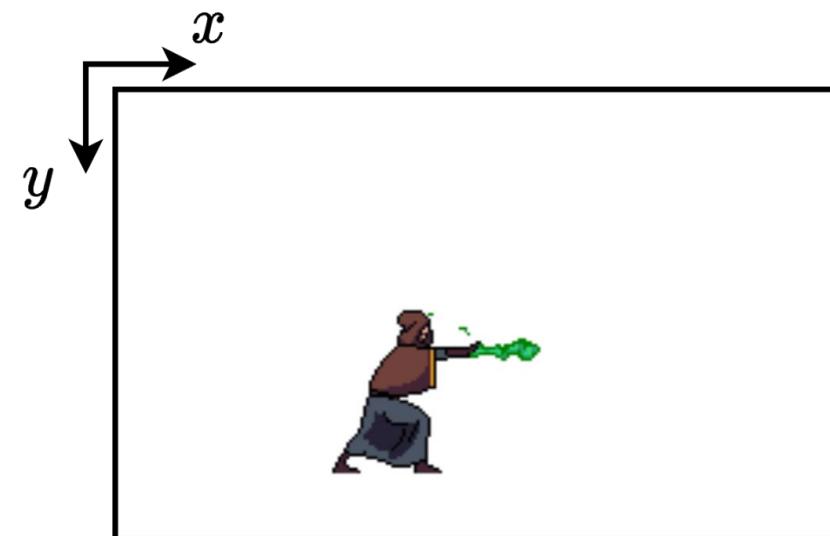
frames

Animaciones

`ix = 1`

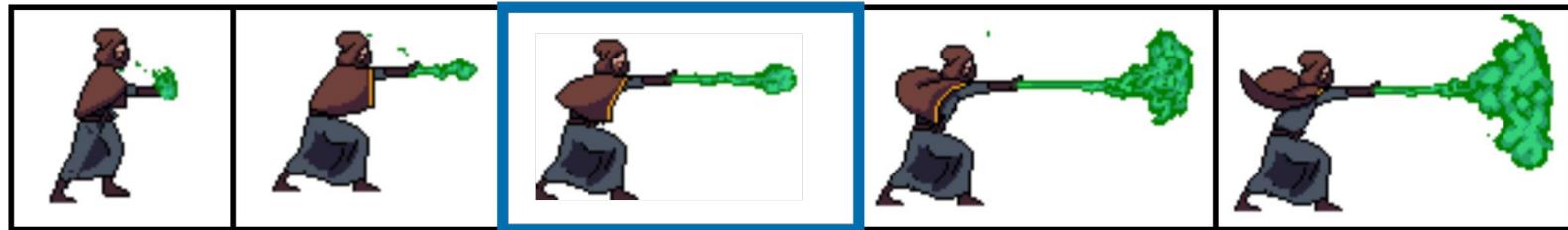


`frames`

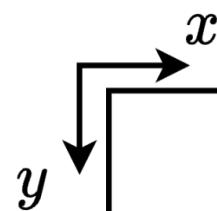


Animaciones

`ix = 2`



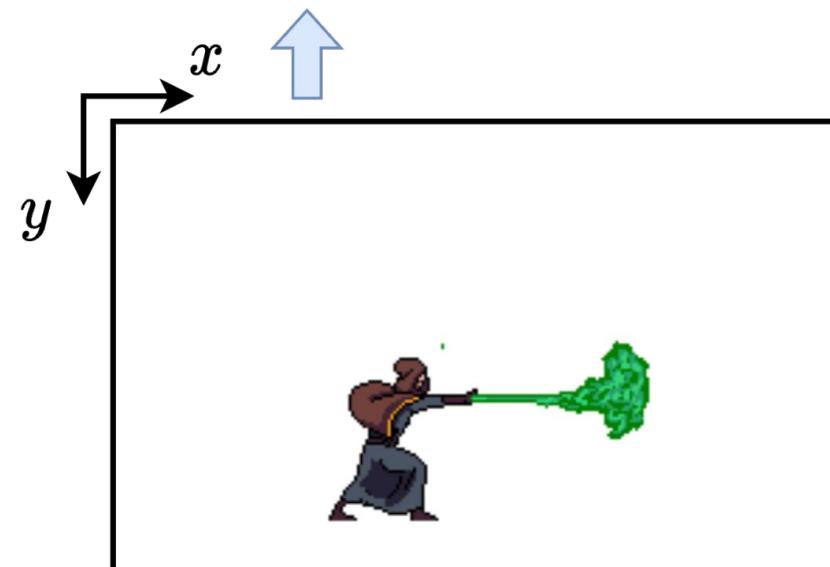
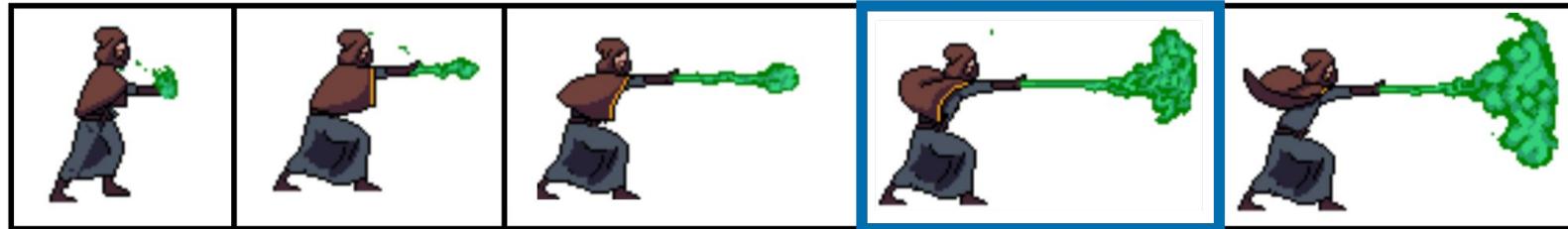
frames



Animaciones

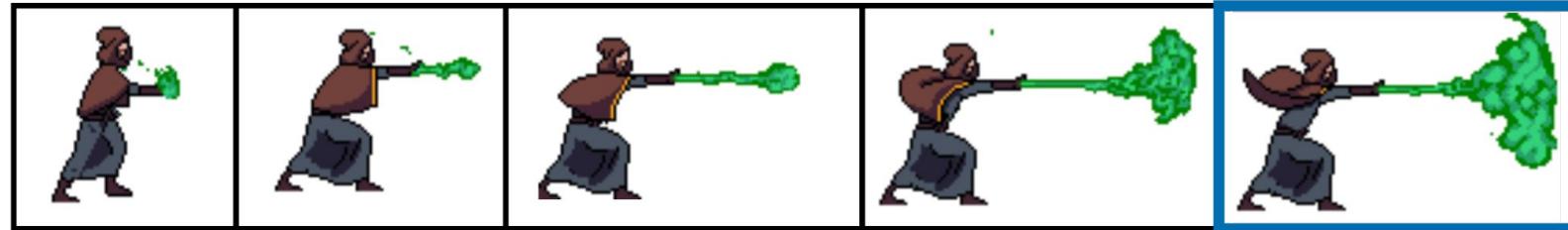
`ix = 3`

`frames`

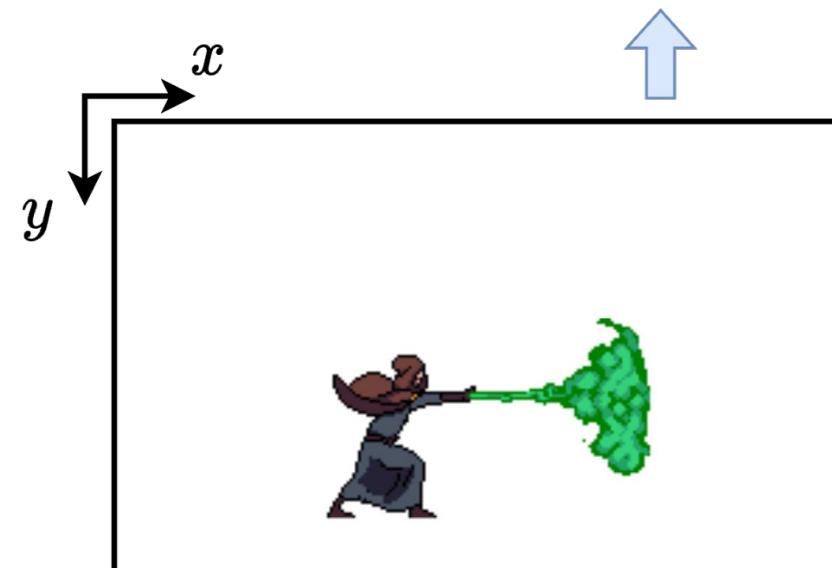


Animaciones

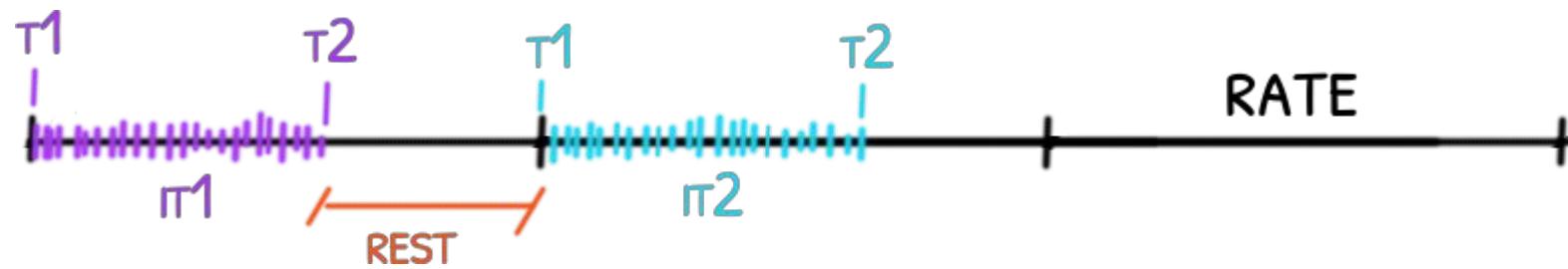
`ix = 4`



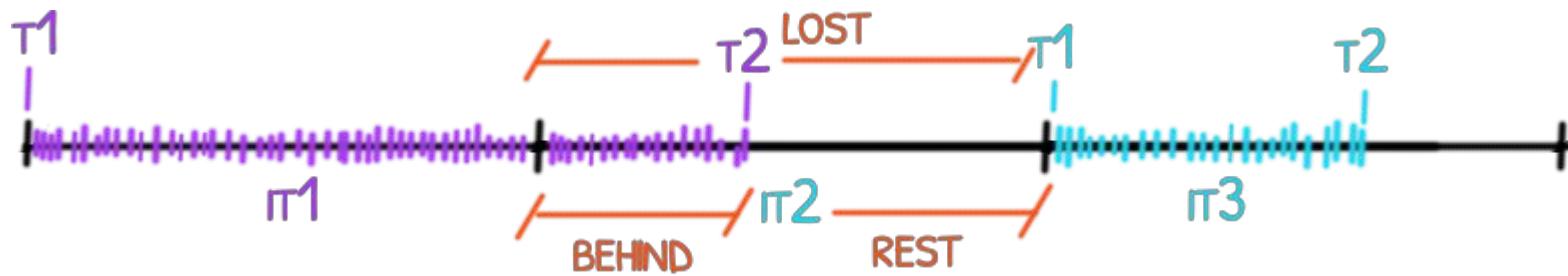
`frames`



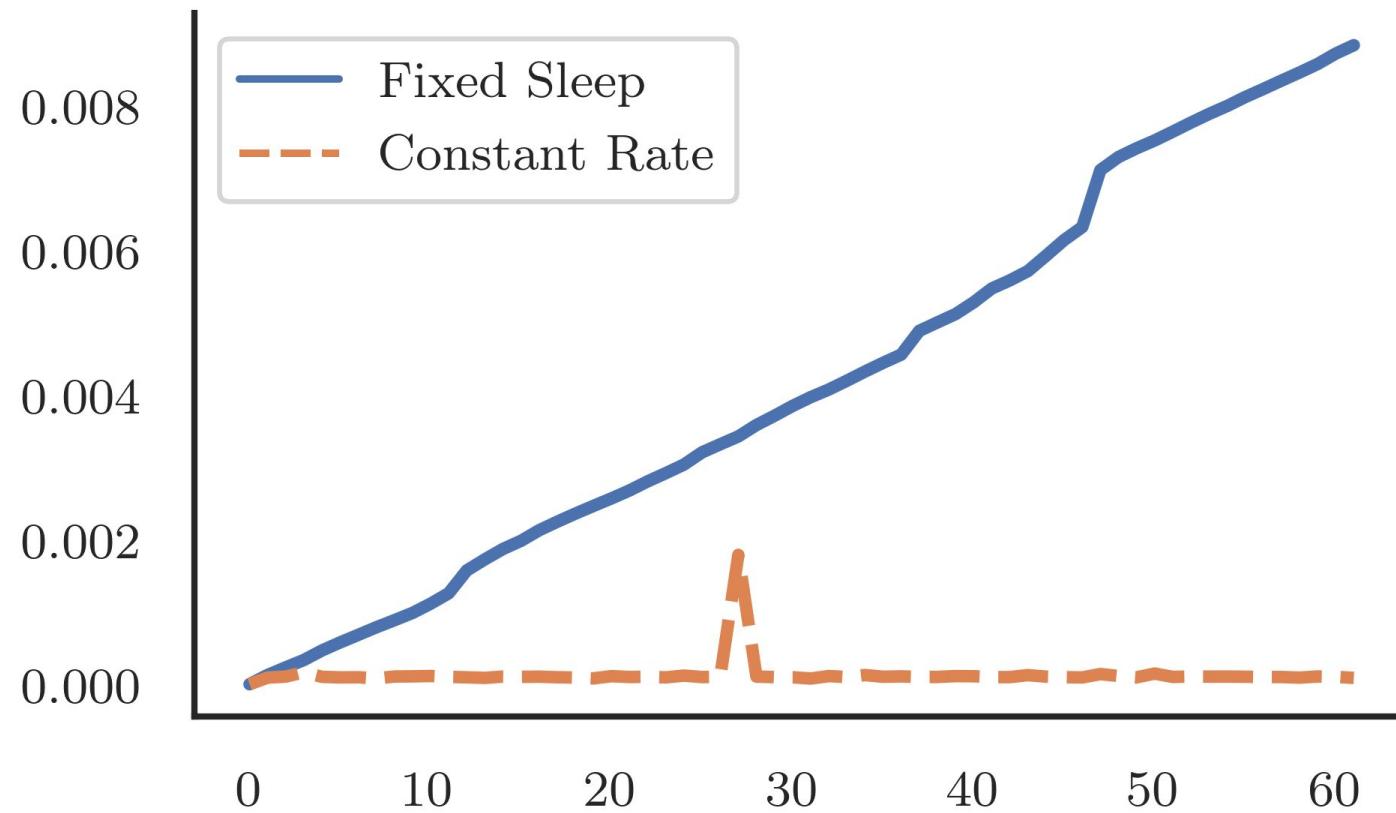
Rest/sleep entre renderizado de frames (iteraciones del render loop)



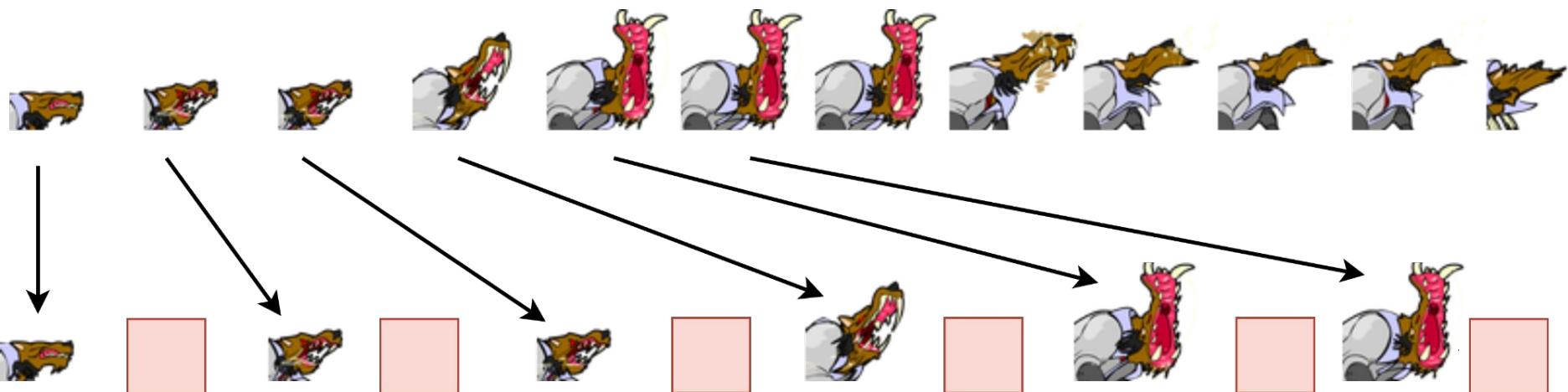
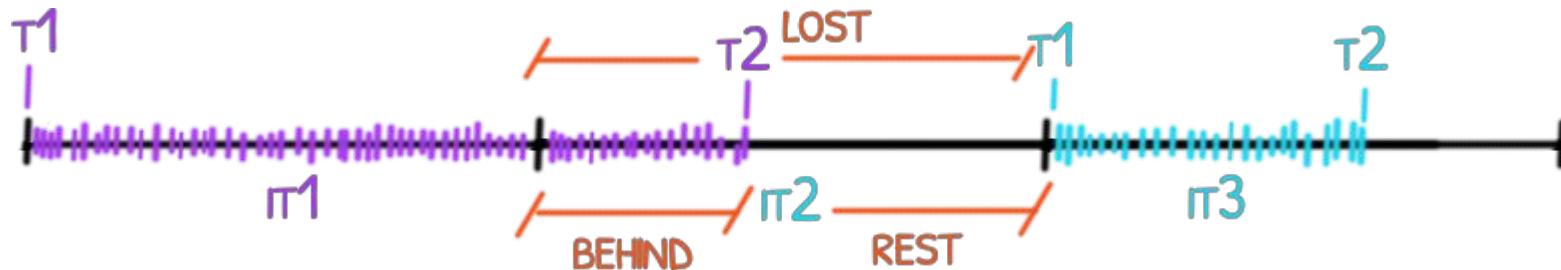
Y si el renderizado tarda más de lo esperado?



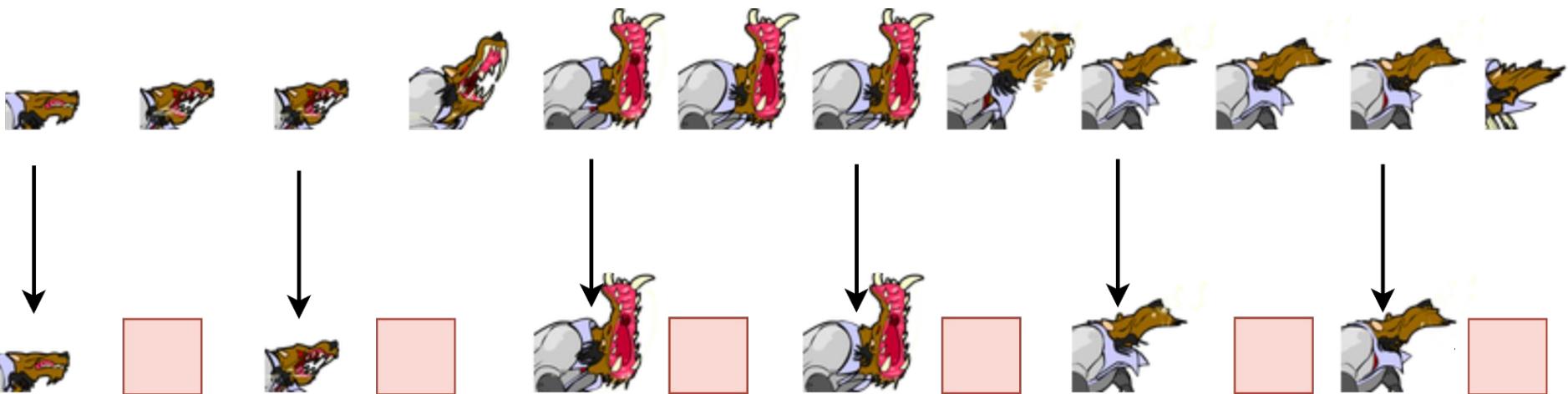
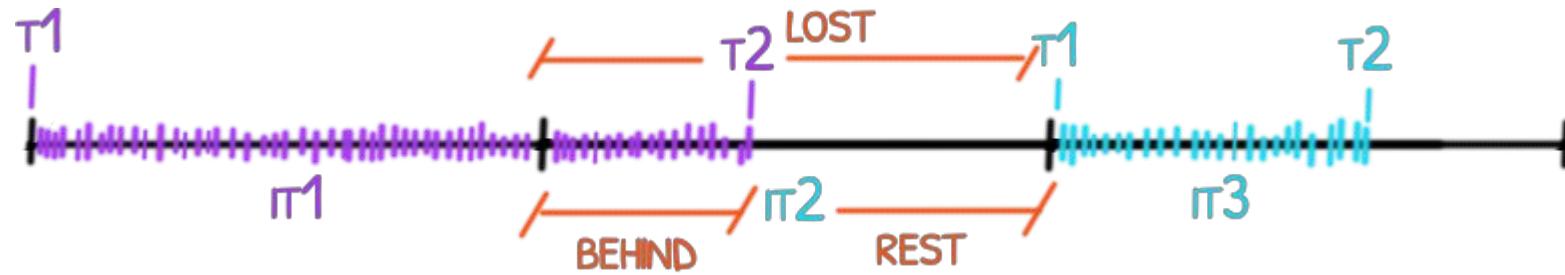
Clock/animacion drift (desfase/traso)



Drop de frames (incorrecto)

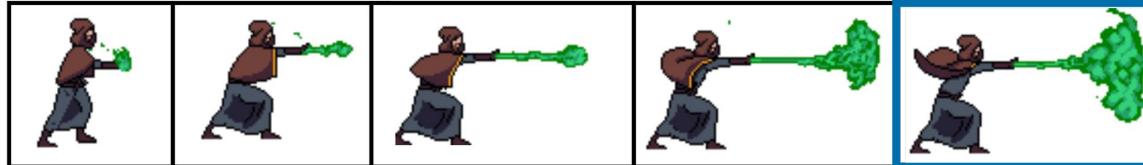


Drop de frames (correcto)



Main loop

`img[]`



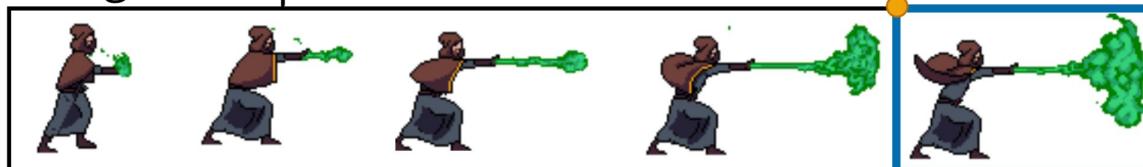
`frames`

`img[4]`



`rects[] = {(x_0, y_0, h_0, w_0), (x_1, y_1, h_1, w_1), ...}`

`img` (aka, sprite sheet)

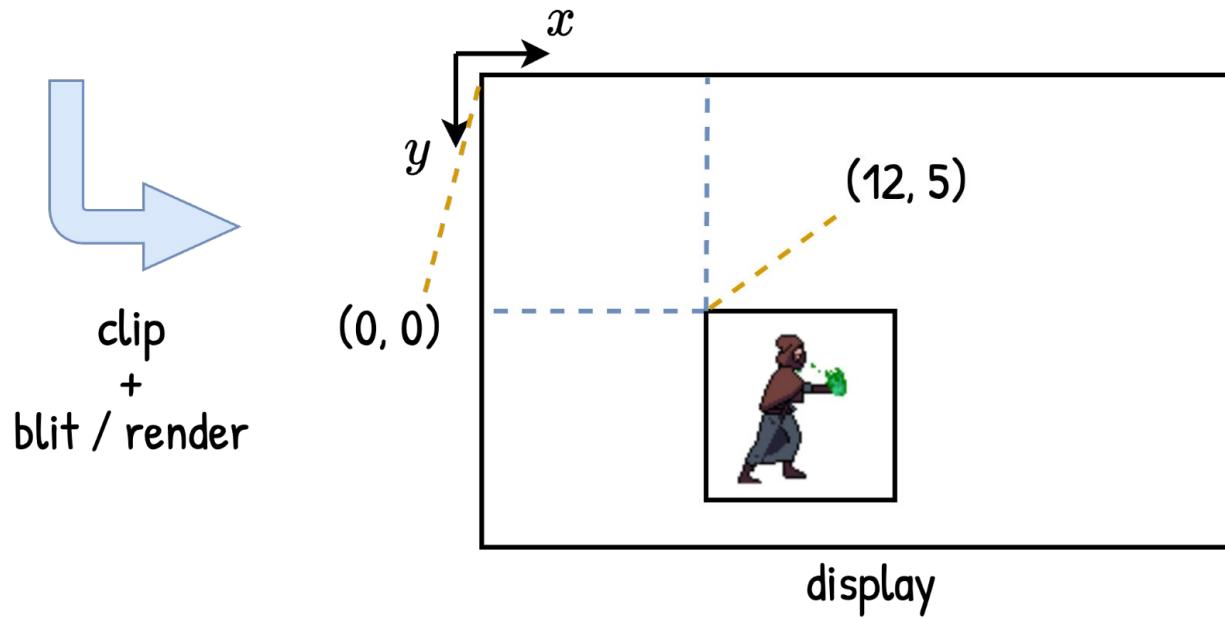
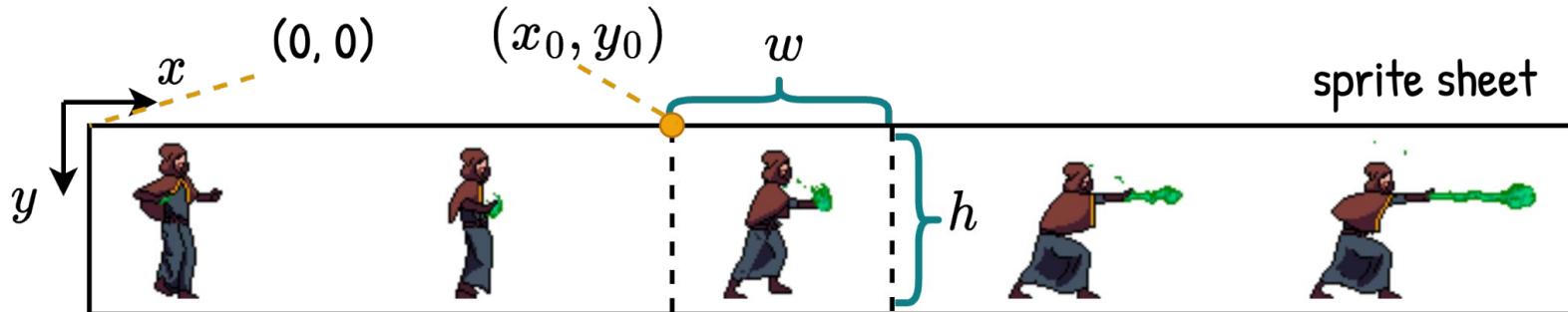


`frames`

`rects[4]`



Animaciones:

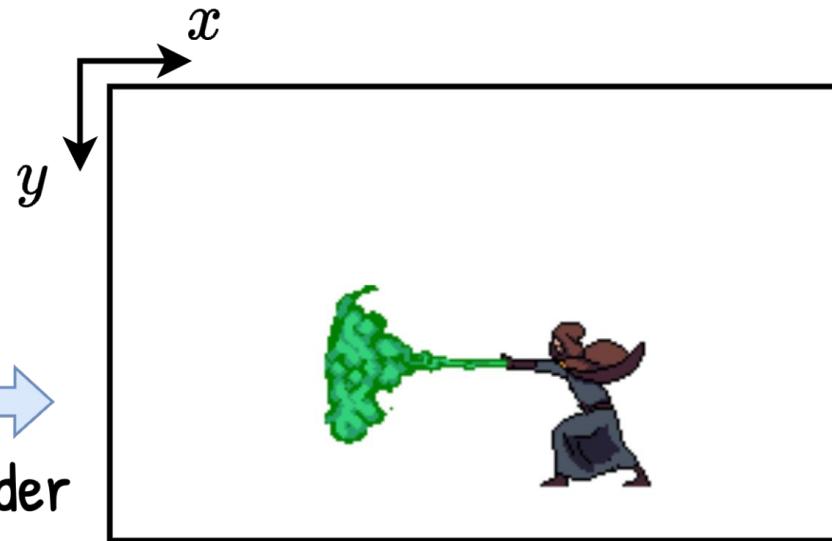




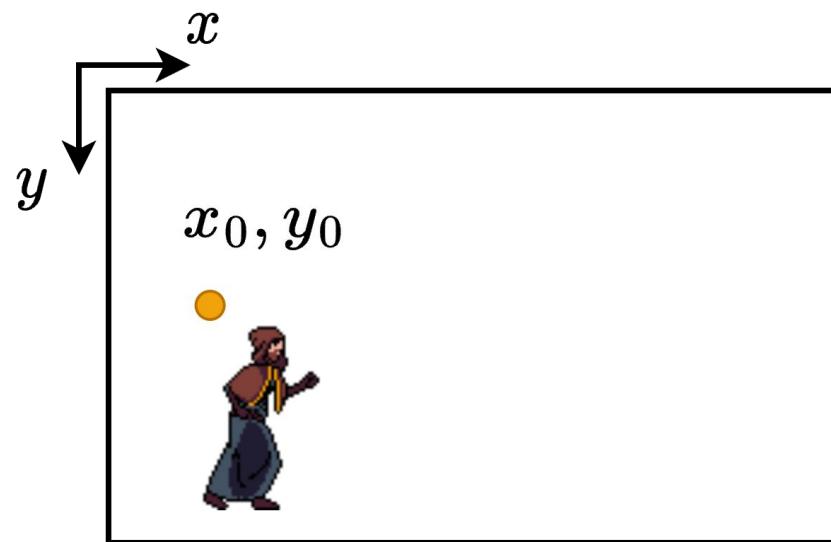
flip



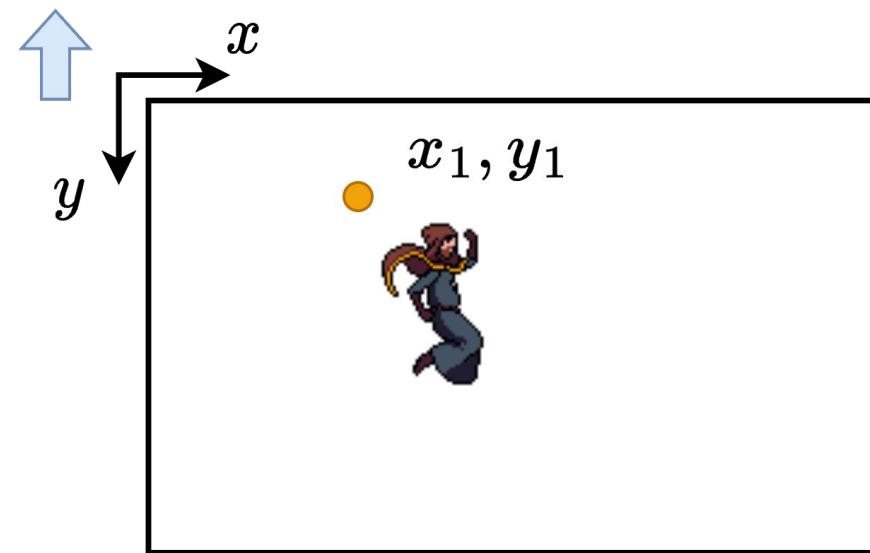
blit / render



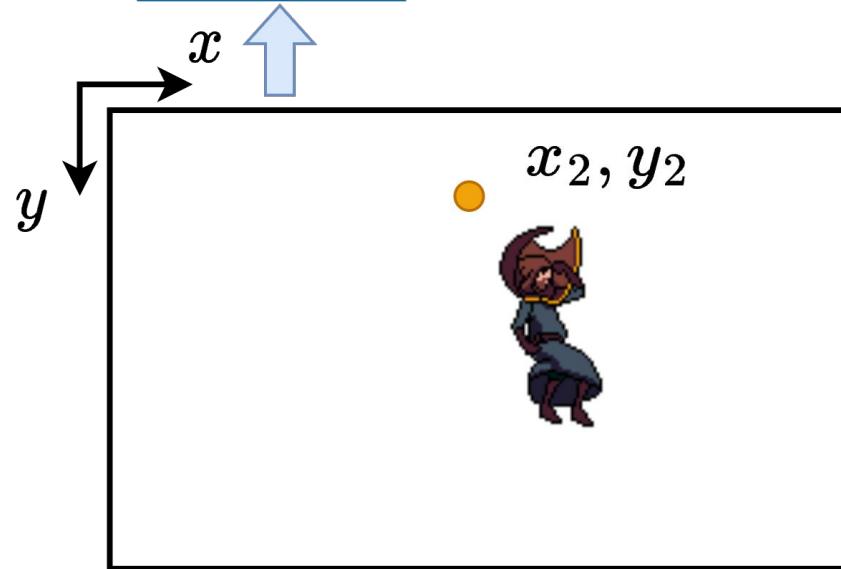
$i_x = 0$



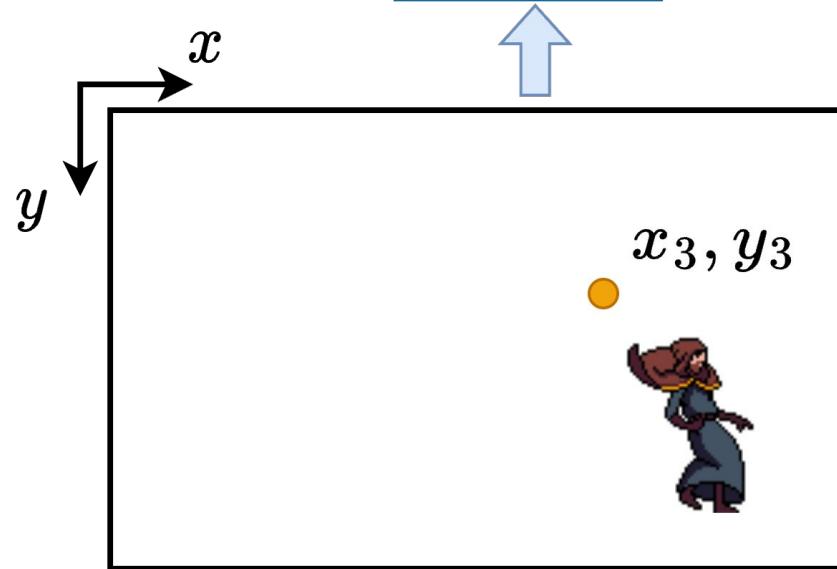
$i_x = 1$

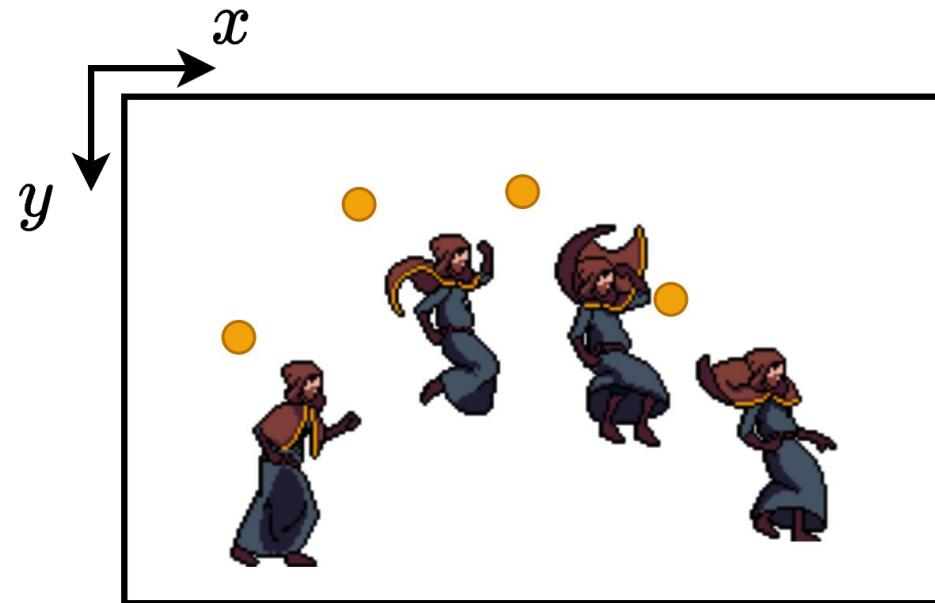


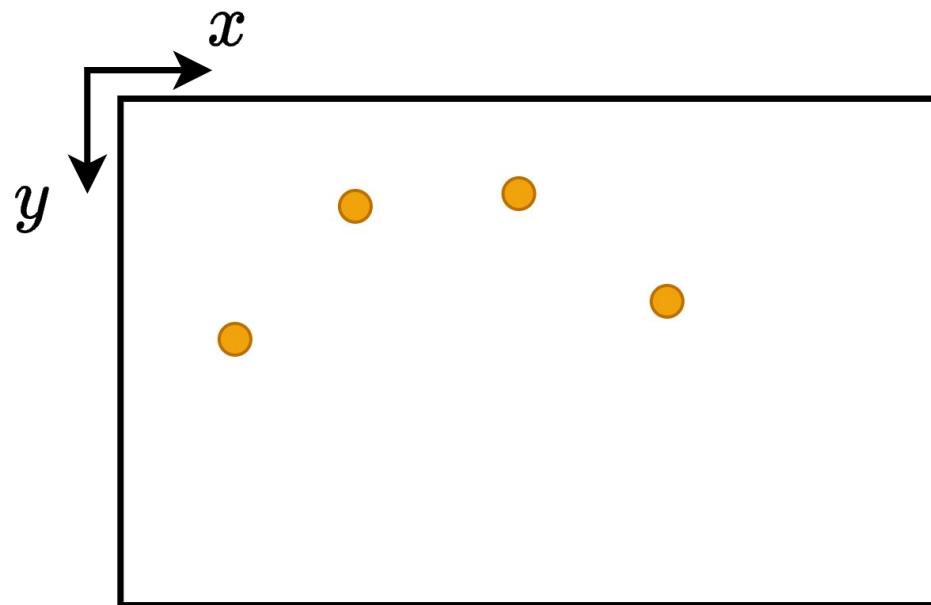
$i_x = 2$

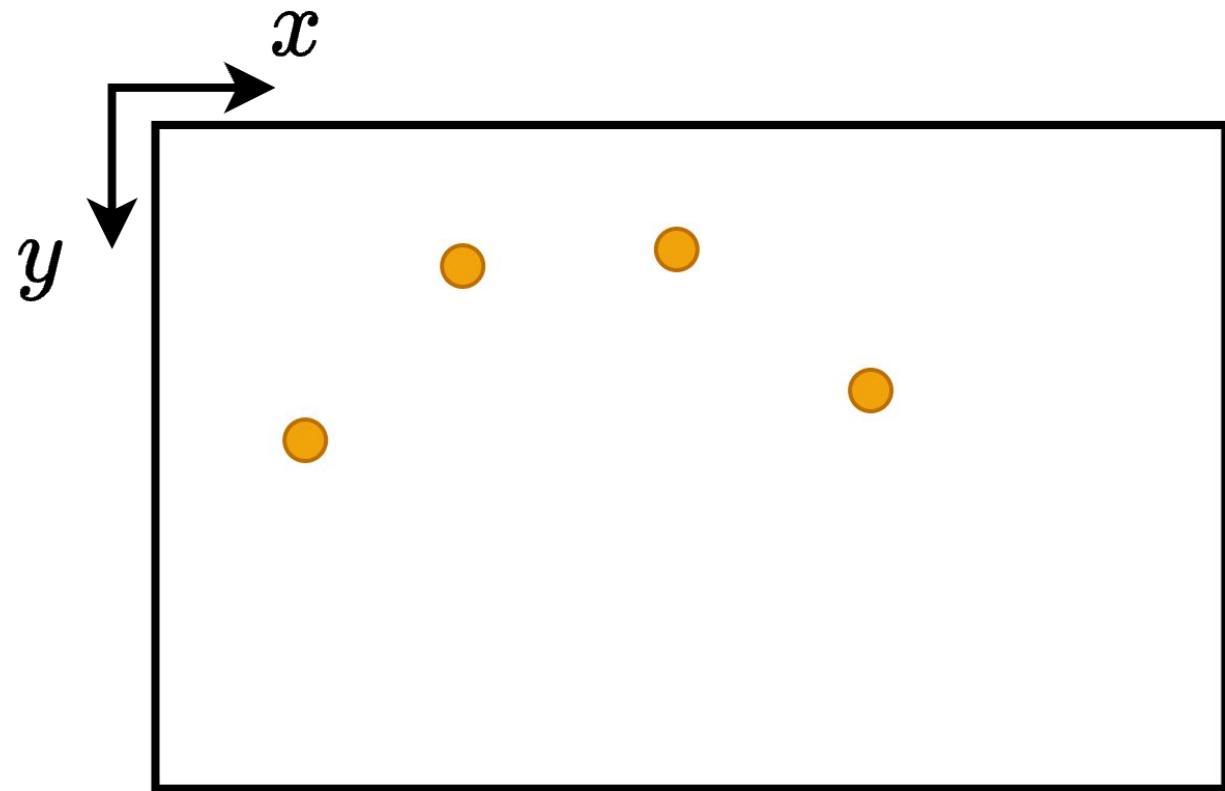


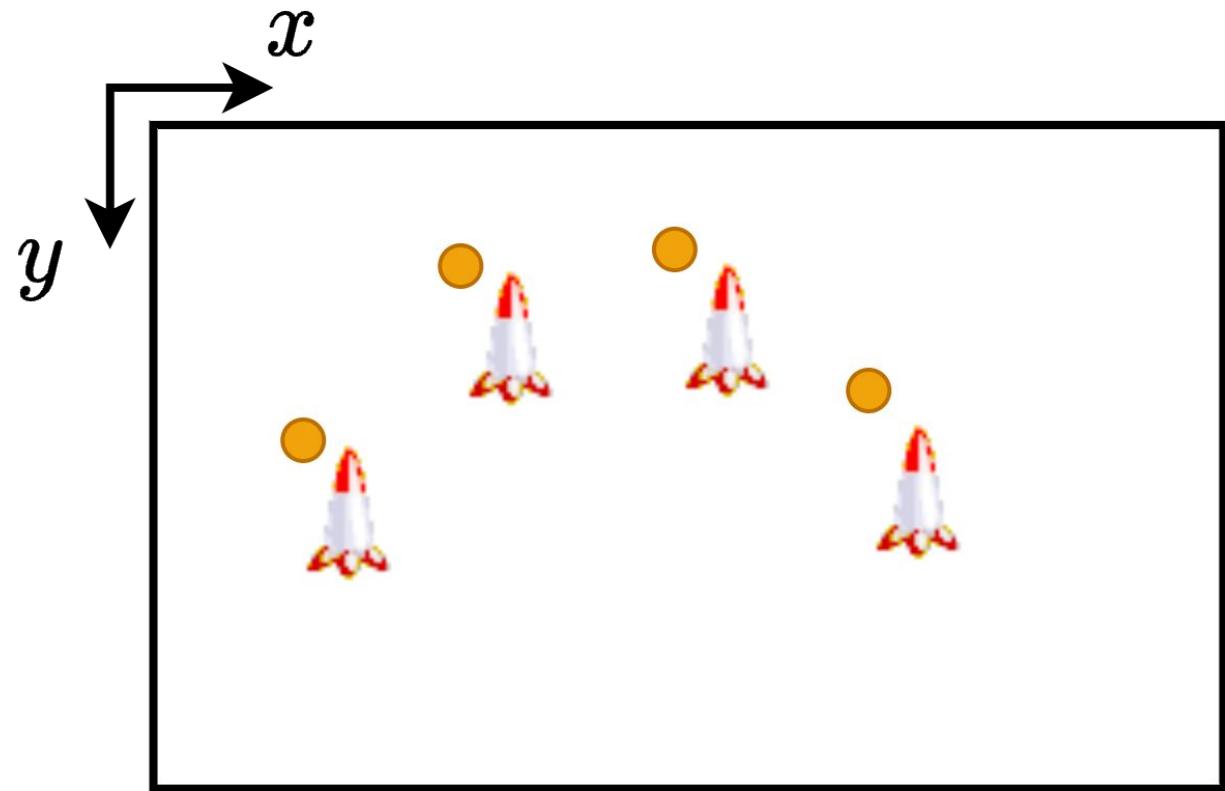
$i_x = 3$





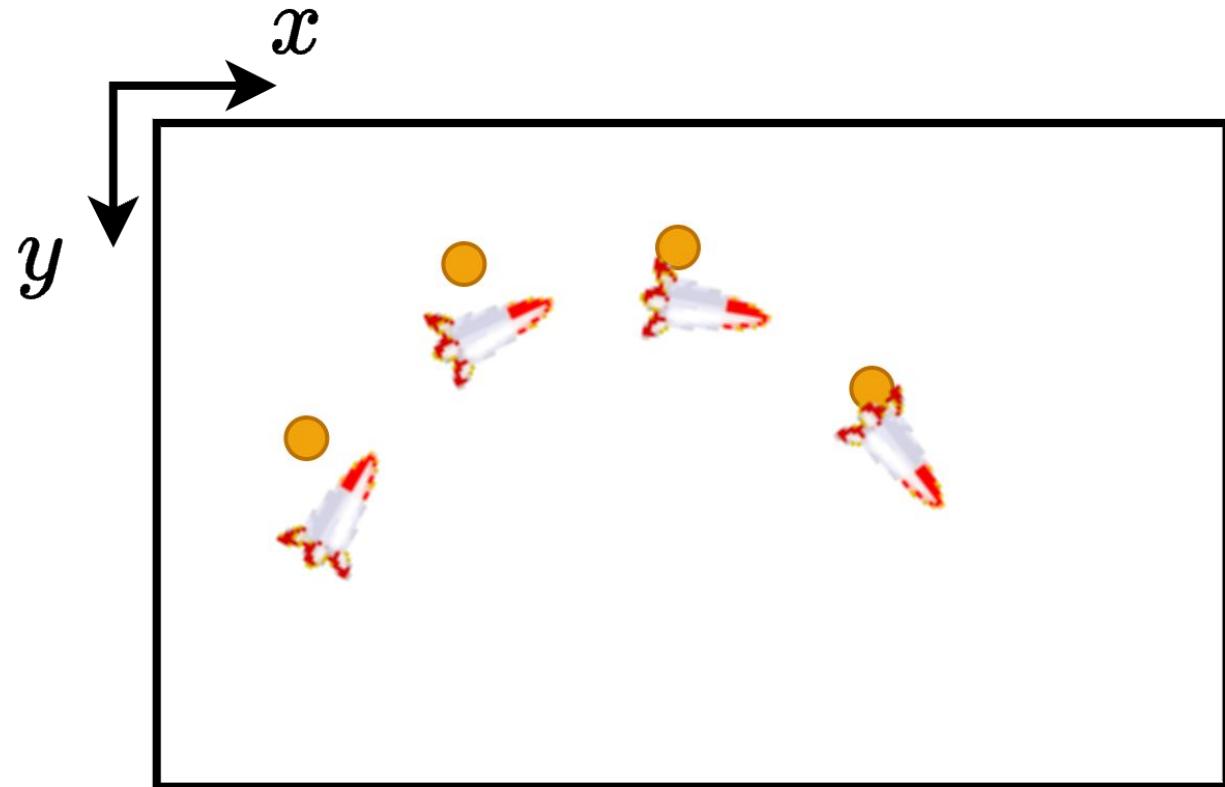


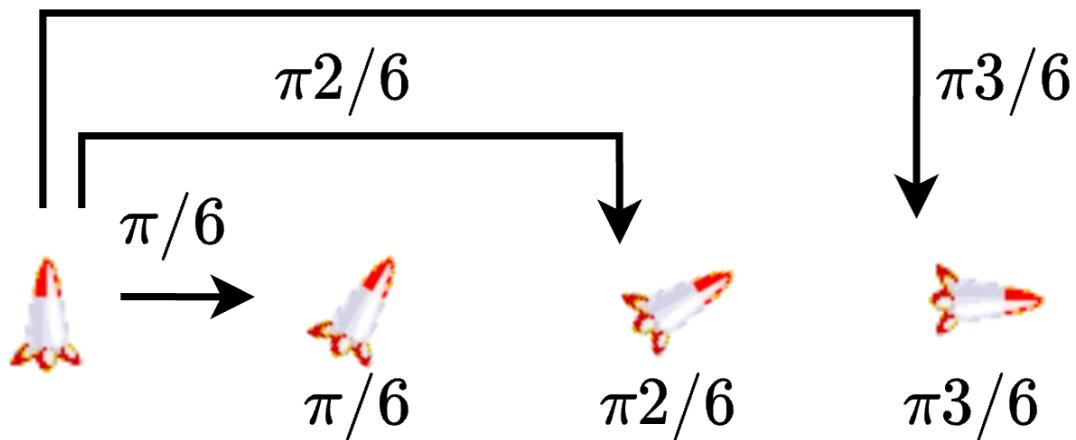
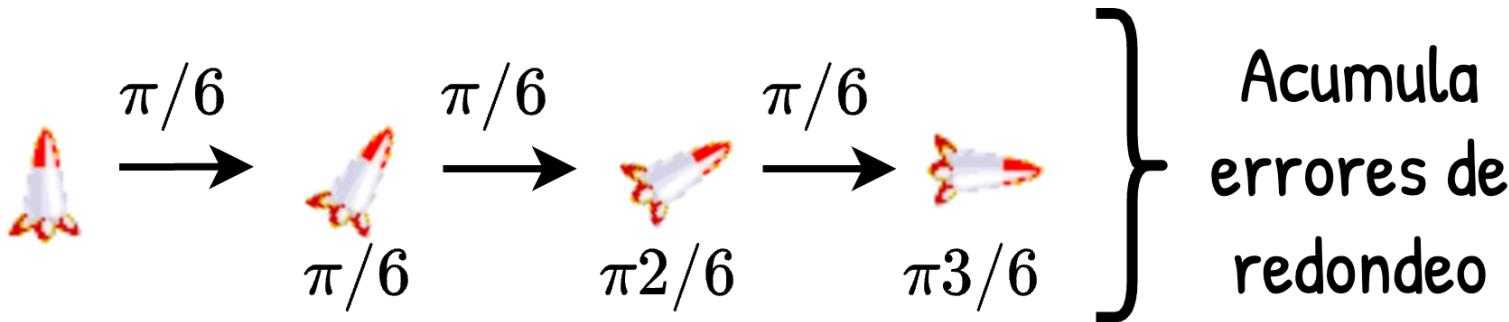


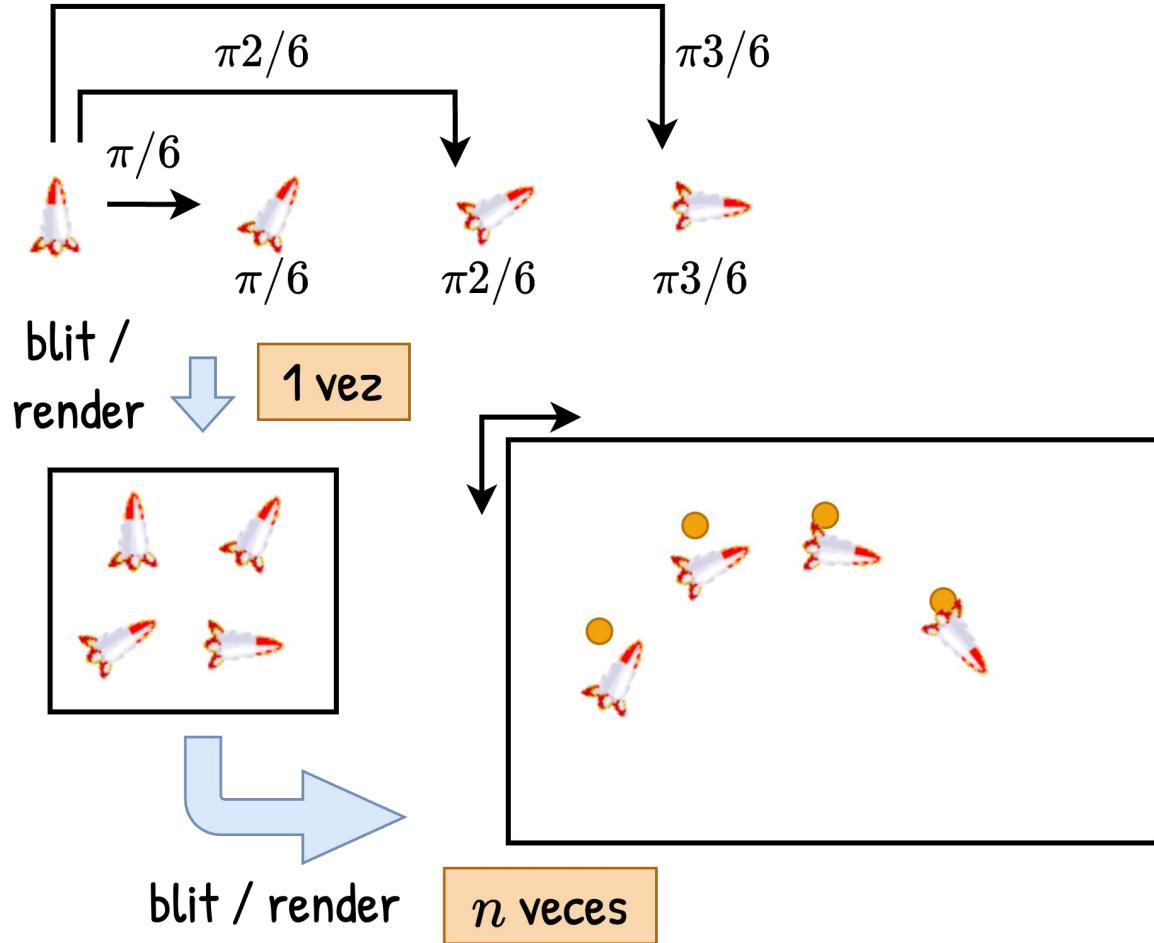




rotate







Resources Pool

