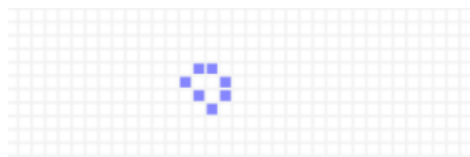


Práctica 2-3

Zhuqing Wang

1. Invariante

Esta configuración corresponde a un *invariante*. (Figura 1-2)



Running Information

Generation: 0 | Live cells: 0 |

Figura 1



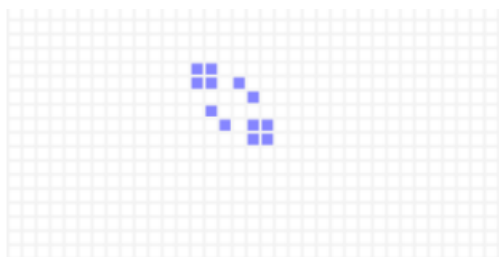
Running Information

Generation: 1 | Live cells: 7 |

Figura 2

2. Oscilador con k=8

Esta configuración corresponde a un *oscilador* con k=8 (Figura 3-12)



Running Information

Generation: 0 | Live cells: 0 |

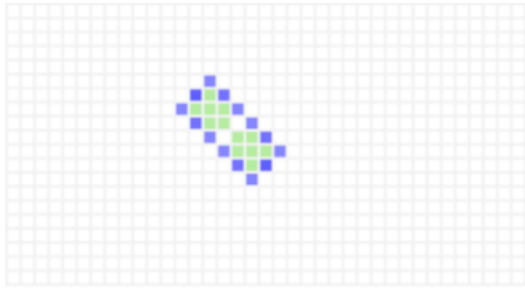
Figura 3



Running Information

Generation: 1 | Live cells: 18 |

Figura 4



Running Information

Generation: 2 | Live cells: 14 |

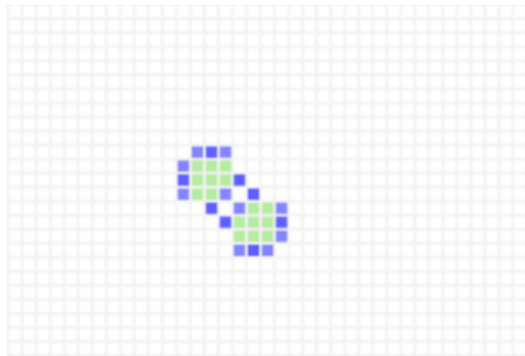
Figura 5



Running Information

Generation: 3 | Live cells: 20 |

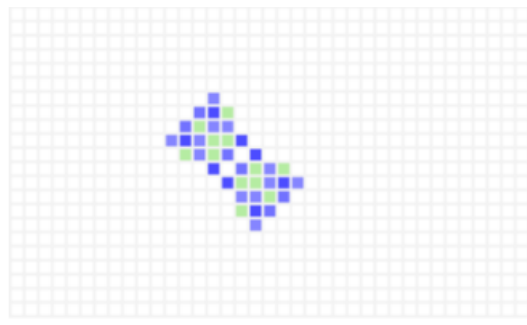
Figura 6



Running Information

Generation: 4 | Live cells: 18 |

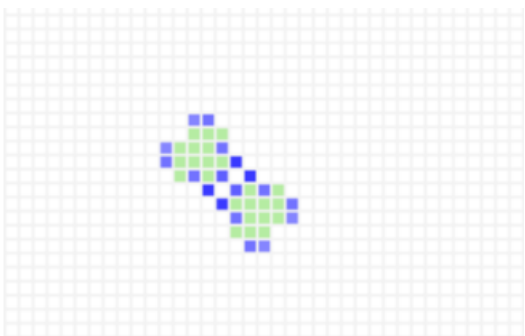
Figura 7



Running Information

Generation: 5 | Live cells: 26 |

Figura 8



Running Information

Generation: 6 | Live cells: 18 |

Figura 9



Running Information

Generation: 7 | Live cells: 16 |

Figura 10



Running Information

Generation: 8 | Live cells: 12 |

Figura 11



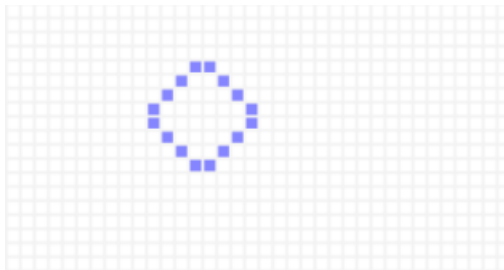
Running Information

Generation: 9 | Live cells: 18 |

Figura 12

3. Oscilador con $k=5$

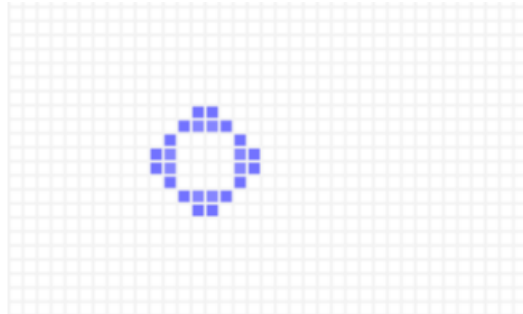
Esta configuración corresponde a un *oscilador* con $k=5$ (Figura 11-16)



Running Information

Generation: 0 | Live cells: 0 |

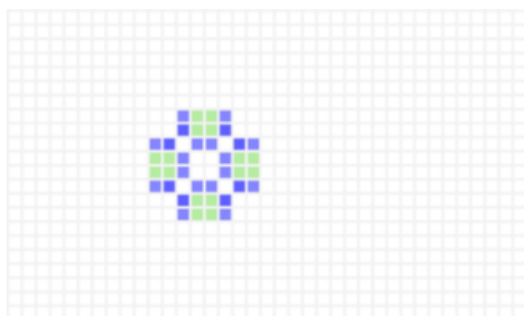
Figura 13



Running Information

Generation: 1 | Live cells: 24 |

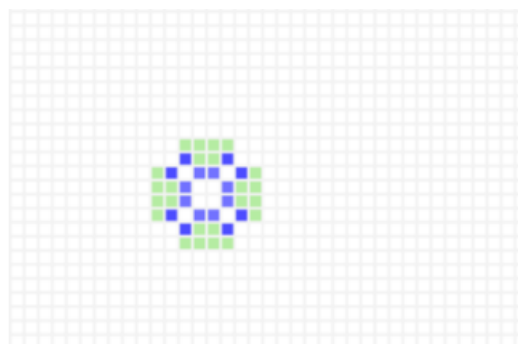
Figura 14



Running Information

Generation: 2 | Live cells: 24 |

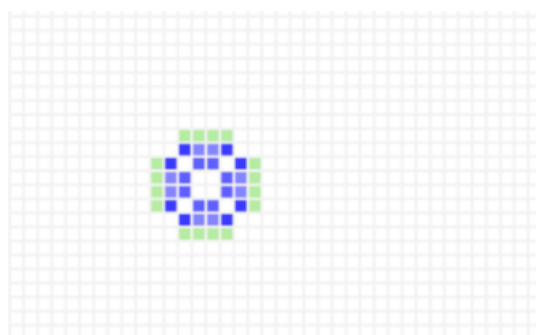
Figura 15



Running Information

Generation: 3 | Live cells: 16 |

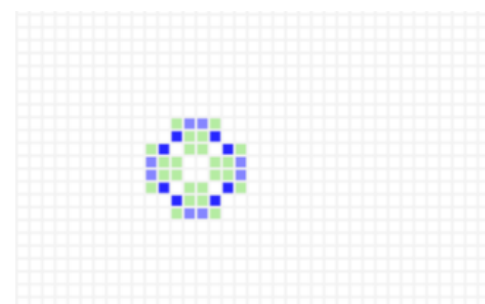
Figura 16



Running Information

Generation: 4 | Live cells: 24 |

Figura 17



Running Information

Generation: 5 | Live cells: 16 |

Figura 18

4. Gliders

Esta configuración corresponde a 4 *gliders*. (Figura 19-22)

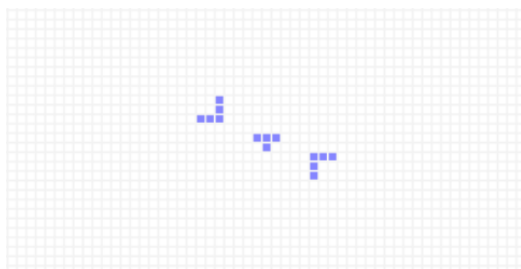


Figura 19

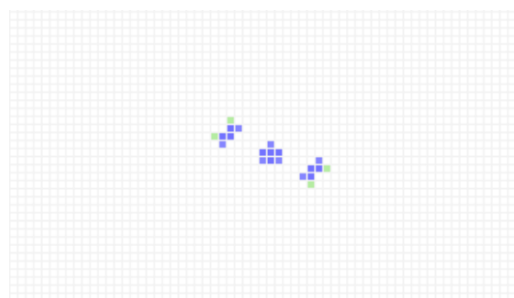


Figura 20

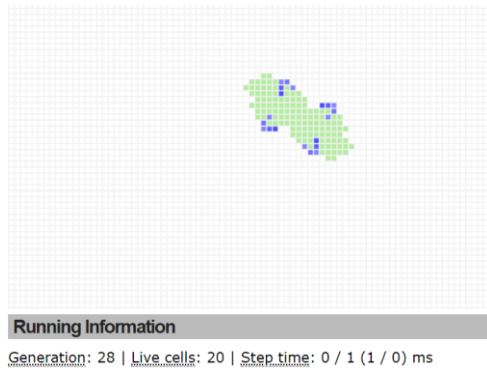
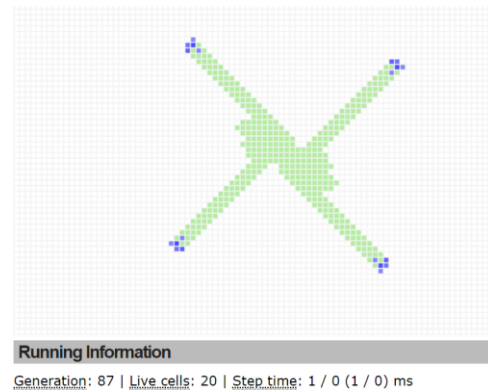


Figura 21



Figrua 22

5. Guns of gliders

Esta configuración corresponde a un *gun of gliders*. Se trata de unos osciladores sin desplazamiento que periódicamente emiten gliders. (Figura 23-25)

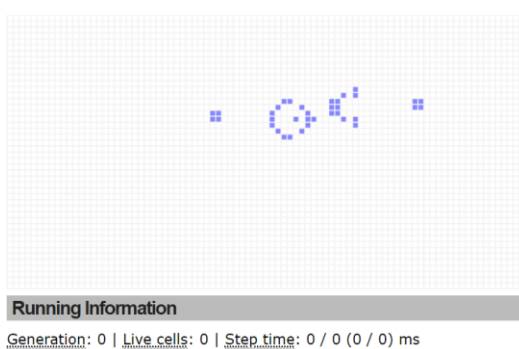


Figura 23

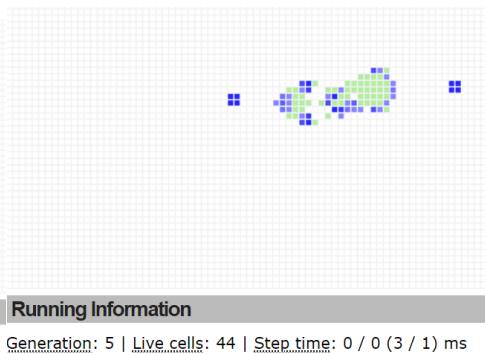


Figura 24

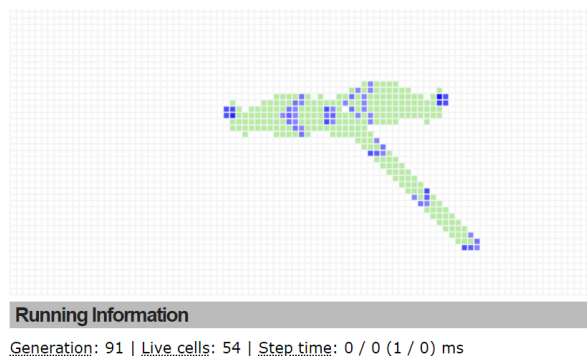
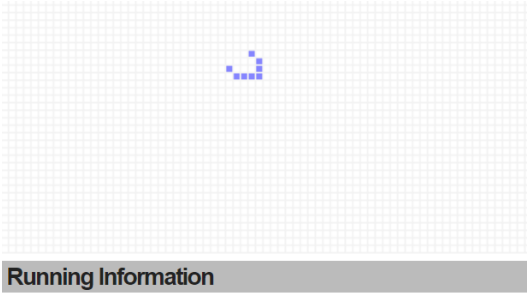


Figura 25

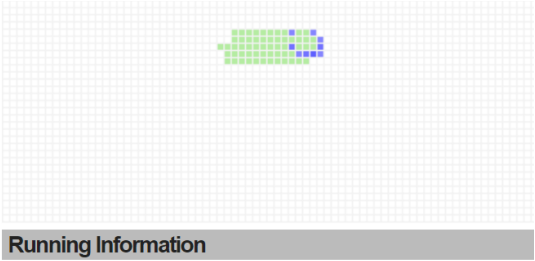
6. Spaceship

Esta configuración corresponde a un Spaceship, ya que se desplaza indefinidamente hacia la derecha. (Figura 26-28)



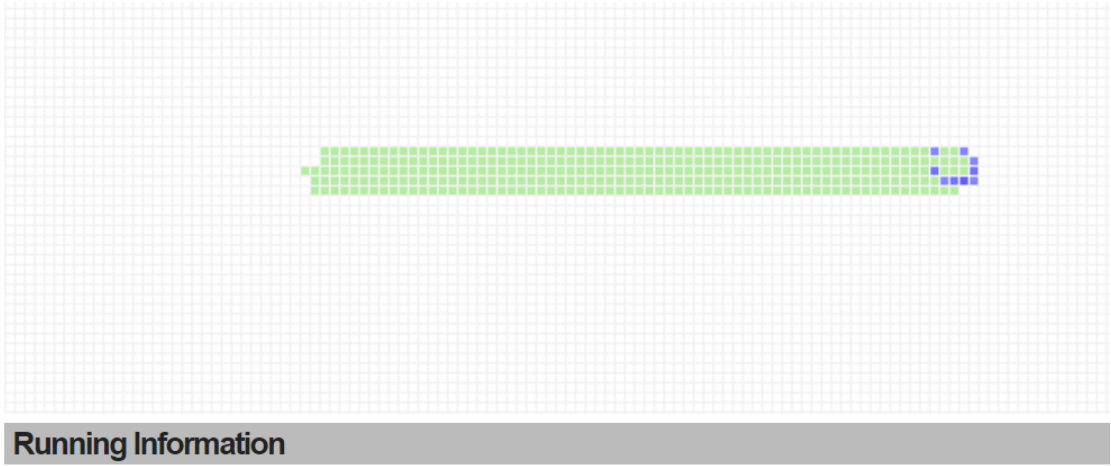
Generation: 0 | Live cells: 0 | Step time: 0 / 0 (0 / 0) ms

Figura 26



Generation: 20 | Live cells: 9 | Step time: 0 / 0 (0 / 0) ms

Figrua 27

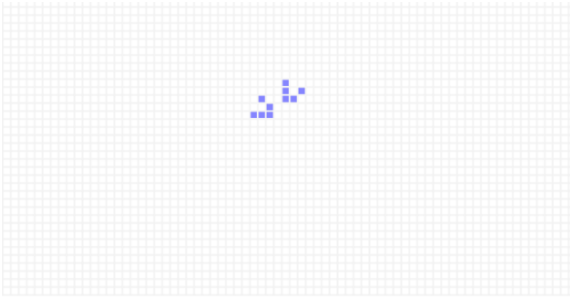


Generation: 128 | Live cells: 9 | Step time: 0 / 0 (0 / 0) ms

Figura 28

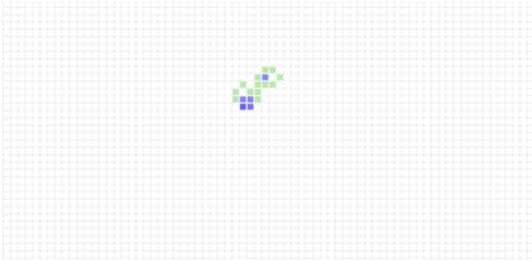
7. Invariante

Esta configuración corresponde a dos *gliders* que se convierten en un invariante.
(Figura 29-31)



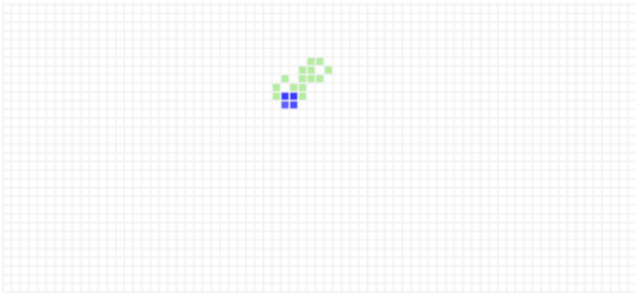
Running Information
Generation: 0 | Live cells: 0 | Step time: 0 / 0 (0 / 0) ms

Figura 29



Running Information
Generation: 3 | Live cells: 5 | Step time: 0 / 0 (0 / 0) ms

Figura 30

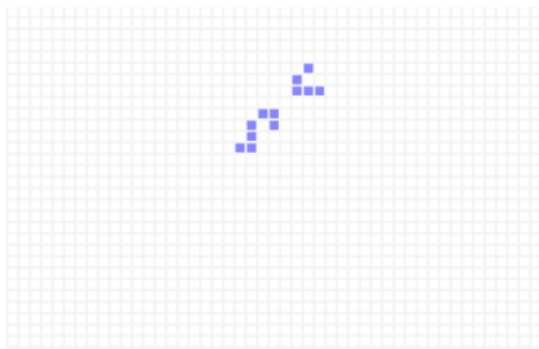


Running Information
Generation: 109 | Live cells: 4 | Step time: 1 / 0 (0 / 0) ms

Figura 31

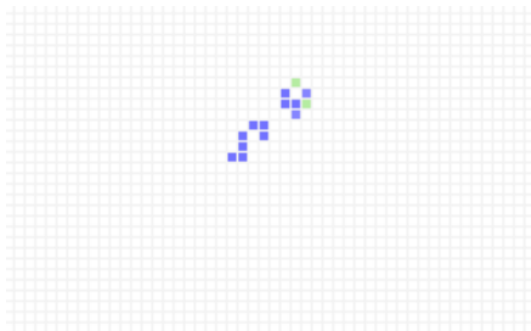
8. Glider and eater

Esta configuración corresponder a un *glider* por arriba y un *eater* por abajo que le elimina, al final se convierte en un *invariante*. (Figura 32-39)



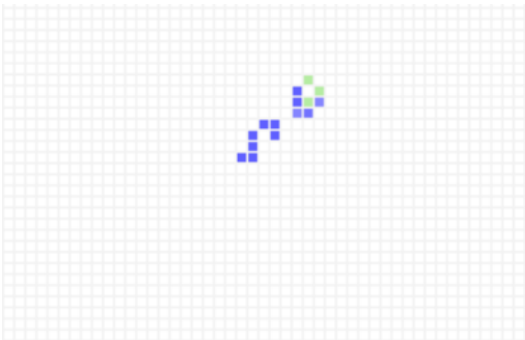
Running Information
Generation: 0 | Live cells: 0 | Step time

Figura 32



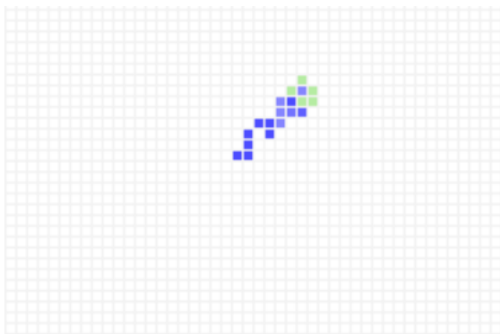
Running Information
Generation: 1 | Live cells: 12 | Step time

Figura 33



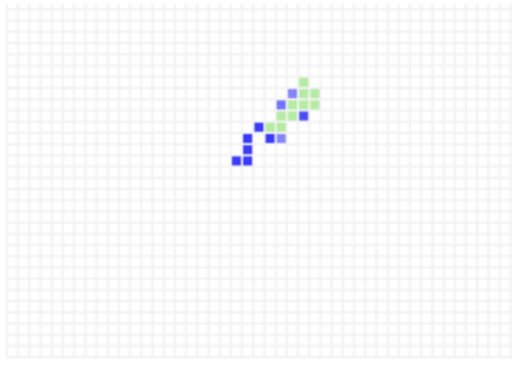
Running Information
Generation: 2 | Live cells: 12 | Step time

Figura 34



Running Information
Generation: 3 | Live cells: 14 | Step time

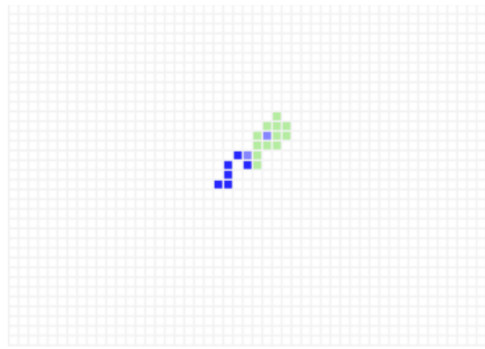
Figura 35



Running Information

Generation: 4 | Live cells: 10 | Step t

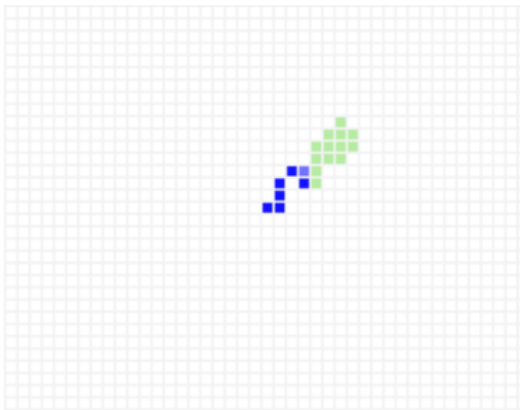
Figura 36



Running Information

Generation: 5 | Live cells: 8 | Step time:

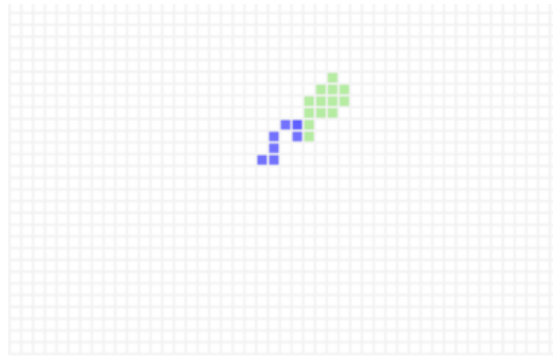
Figura 37



Running Information

Generation: 6 | Live cells: 7 | Step

Figura 38



Running Information

Generation: 145 | Live cells: 7 | Step t

Figura 39