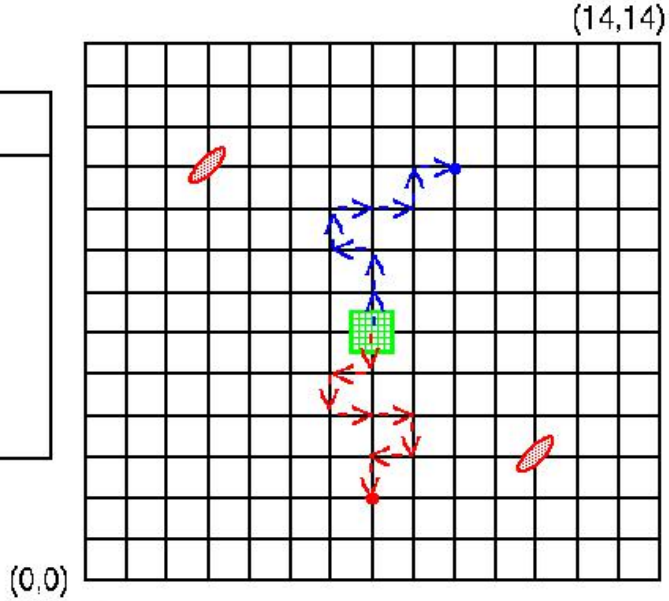
Make the folloing simulation by hand

1. 6 dogs start from (7,7)
2. Create 6 random chromosomes
   with 8 genes 1,2,3 or 4 to determine the route
3. Original fitness f_i is
   8 - {distance from the dog's final positiom
   and the nearest sausge}.
4. Draw the routes of all 6 dogs like the right Fig.
5. Calculate Shared Fitnesq with $\sigma = 3$ F_i

E.g.

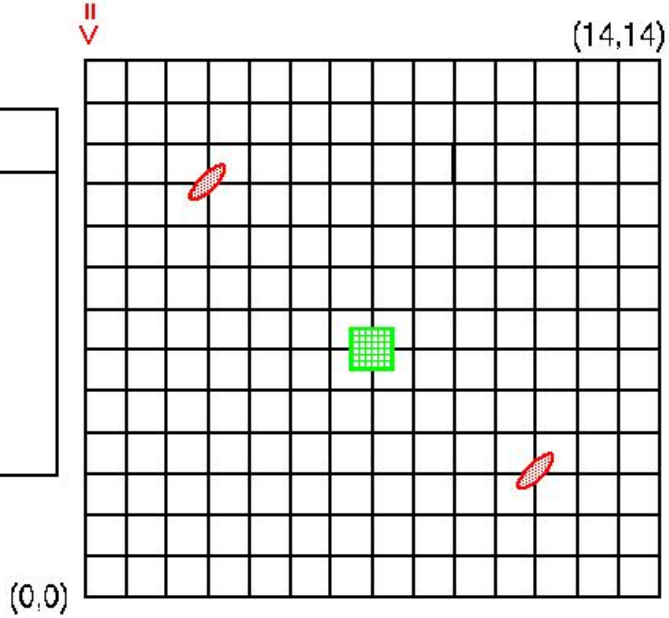
random chromosomes	f_i	F_i
(3,2,3,4,4.3.2.3)	3	
(1,1,2,1,4.4.1.4)	2	
(2,1,3,2,3,1,2,1)		
(4,3,1,2,4,2,2,1)		
(3,2,4,1,3,1,4,2)		
(1,2,4,2,1,2,3,3)		



6. Select 2 parents randomly from the best 4 dogs
7. Create child by uniform crossover
8. repeat 6. 6 times to create 2nd generation

2nd generation

random chromosomes	f_i	F_i



9. repeat 5. to 7. till the best 2 dogs reach
   each of the 2 sausages