Snake road cross problem

There is an snake of initial length of L_i, It wants to cross a road of size Nx4 which is full of hurdles and frogs.

The snake can move either left or right at a time in order to choose the frog it wants to eat.

Each frog has its weight W_i and the hurdle gives pain of P_i If the snake choose to pass through it.

Every time if the snake eat the frog it get its length increased by the value of

W_i ($L_i = L_i+W_i$) and if it strikes with hurdle it is decreased by the value P_i ($L_i = L_i-P_i$).

The snake may die or live before reaching the other end.

See the figure below:

F	F	F	H
H	F	F	H
F	F	H	F
F	H	F	F
F	F	H	F
H	F	H	F

Find the maximum length of the snake before it reaches to other end.

Output the result as L_f and die/live i.e. max length it can achieve and weather it is alive or not.