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Question 3:

We have n+1 squares in total, in this question source is square 0 and sink is square n

For each square i, directly linked an edge from i to i+1 and i+2,i+3.....i+k with infinity edge capacity.

Although the capacity between any two squares is infinity but each square i has a restriction ,the maximum children that can access this square, which is A[i], and lets separate every squares to two notes Nin(i) and Nout(i),linked from Nin(i) to Nout(i) with edge capacity A[i].

Then we can use Max-flow algorithm to get the maximum flow, which is the largest number of children who can successfully complete the game

Time complexity $O((2n+2)^3) = O(n^3)$