

Greedy Approach.

The idea is to reduce the difference btw start & goal node. Here our goal node is last index of the array.

eg. 1 2 3 3 0 0
 ↑ ↑
 start goal

We will approach the solution step by step.

Suppose we are at i^{th} node so, to know will it be possible for me to reach $i+1$ node is to check whether $i + \text{nums}[i] \geq i+1$ if it is, then we will move forward.

Similarly we can bring goal node step by step towards start node & at the end if $\text{goal} == \text{start}$ or $== 0$ return true.

$i \Rightarrow 0 \quad 1 \quad 2 \quad 3 \quad 4 \quad 5$

1 2 0 3 0 0

↑
start

↑
goal

goal = ~~new~~ $N - 1 = i$ (N is size of arr)

check if $i + A[i] \geq \text{goal} \Rightarrow \text{Yes.}$

$$5 + 0 = 5$$

Now update goal node to new i (as
(if $i \neq \text{goal}$ we remain at same pos in first step))

decrement i

1 2 0 3

0
↓
0

↑ goal

goal = 5

check if $i + A[i] \geq \text{goal}$

$4 + 0 \not\geq \text{goal}$ so, don't

update your goal state. , decrement i

1 2 0 3 0 0

↑
 i

↑ goal

goal = 5

check if $i + A[i] \geq \text{goal}$

$$3 + 3 \geq \text{goal } 5$$

so, update goal = i

Similarly when $i=0$, check if
goal = 0, if not then we can't reach
goal state.