

50+ Number of Jumps to Reach End-array Operation MCQs with FREE PDF

1. What will be the minimum number of jumps required to reach the end of the array `arr[] = {1,2,0,0,3,6,8,5}`?

- a) 1
- b) 2
- c) 3
- d) not possible to reach the end

Answer: not possible to reach the end

2. It is not possible to find the minimum number of steps to reach the end of an array in linear time.

- a) true
- b) false

Answer: false

3. In how many different ways we can reach the end of the array `arr[]={1,3,5,8,9}`?

- a) 1
- b) 2
- c) 3
- d) 4

Answer: 4

4. What will be the worst case time complexity of the following code?

```
#include <bits/stdc++.h>
using namespace std;

void func(int arr[], int n)
{
    int count[n];
    memset(count, 0, sizeof(count));

    for (int i=n-2; i>=0; i--)
    {
        if (arr[i] >= n - i - 1)
            count[i]++;

        for (int j=i+1; j < n-1 && j <= arr[i] + i; j++)

            if (count[j] != -1)
                count[i] += count[j];

        if (count[i] == 0)
            count[i] = -1;
    }

    for (int i=0; i<n; i++)
```

```
        cout << count[i] << " ";
    }

int main()
{
    int arr[] = {1, 3, 5, 8, 9};
    int n = sizeof(arr) / sizeof(arr[0]);
    func(arr, n);
    return 0;
}
```

- a) $O(n^{1/2})$
- b) $O(n)$
- c) $O(n^{3/2})$
- d) $O(n^2)$

Answer: $O(n^2)$

5. It is not possible to reach the end of an array if starting element of the array is 0.

- a) true
- b) false

Answer: true

6. What is the minimum possible time complexity to find the number of steps to reach the end of an array?

- a) $O(n)$
- b) $O(n^2)$
- c) $O(n^{3/2})$
- d) $O(1)$

Answer: $O(n)$

7. What will be the minimum number of jumps required to reach the end of the array $arr[] = \{1, 3, 6, 3, 6, 8, 5\}$?

- a) 1
- b) 2
- c) 3
- d) not possible to reach the end

Answer: 3