146. Given an array arr of positive integers sorted in a strictly increasing order, and an integer k. return the kth positive integer that is missing from this array.

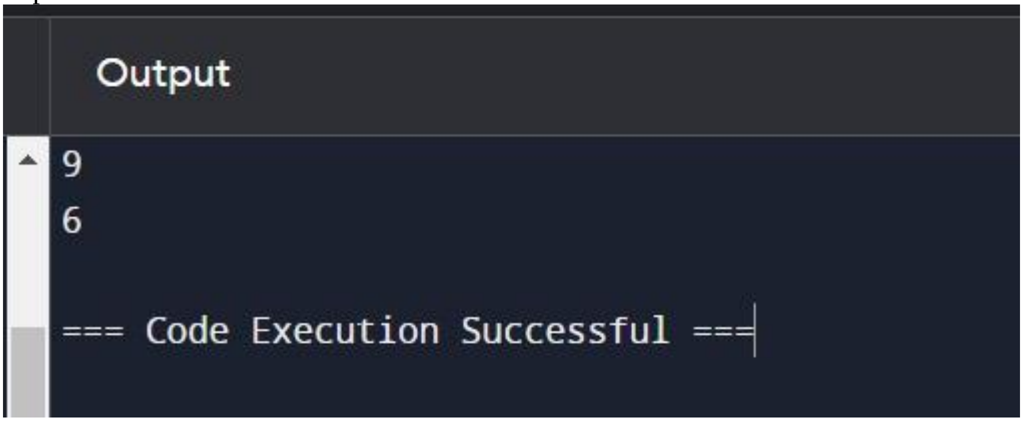
Program:-

```
def find_kth_missing(arr, k):
    i = 0
    missing_count = 0

    while i < len(arr):
        if i == 0:
            missing_in_between = arr[i] - 1
        else:
            missing_in_between = arr[i] - arr[i-1] - 1

        if missing_count + missing_in_between >= k:
            # kth missing integer is between arr[i-1] and arr[i]
            return arr[i-1] + (k - missing_count)

        missing_count += missing_in_between
        i += 1
```

input:-

```
arr1 = [2, 3, 4, 7, 11]
k1 = 5
```

ouput:-



```
9
6

=== Code Execution Successful ===
```

Time complexity:-O(log n)