SMALLEST ELEMENT MISSING IN SORTED ARRAY

CODE:

#include<iostream>

#include<algorithm>

using namespace std;

int smalest\_missing\_num(int nums[], int start\_pos, int end\_pos)

{

if (start\_pos > end\_pos)

return end\_pos + 1;

if (start\_pos != nums[start\_pos])

return start\_pos;

int mid = (start\_pos + end\_pos) / 2;

if (nums[mid] == mid)

return smalest\_missing\_num(nums, mid + 1, end\_pos);

return smalest\_missing\_num(nums, start\_pos, mid);

}

int main()

{

int nums[] = {0, 1, 3, 4, 5, 6, 7, 8, 10};

int result;

int n = sizeof(nums)/sizeof(nums[0]);

cout << "Original array: ";

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

cout << nums[i] <<" ";

result = smalest\_missing\_num(nums, 0, n-1);

cout << "\nSmallest missing element is " << result;

return 0;

}