2. Find the smallest positive integer value that cannot be represented as sum of any subset of a given array sorted in ascending order.

#include <stdio.h>

int findSmallest(int arr[], int n)

{

int res = 1;

for (int i = 0; i < n && arr[i] <= res; i++)

res = res + arr[i];

return res;

}

int main()

{

int arr1[] = {1, 3, 4, 5};

int n1 = sizeof(arr1)/sizeof(arr1[0]);

printf("output1: %d\n", findSmallest(arr1, n1));

int arr2[] = {1, 2, 6, 10, 11, 15};

int n2 = sizeof(arr2)/sizeof(arr2[0]);

printf("output2: %d\n", findSmallest(arr2, n1));

int arr3[] = {1, 1, 1, 1};

int n3 = sizeof(arr3)/sizeof(arr3[0]);

printf("output3: %d\n", findSmallest(arr3, n1));

int arr4[] = {1, 1, 3, 4};

int n4 = sizeof(arr4)/sizeof(arr4[0]);

printf("output4: %d\n", findSmallest(arr4, n1));

return 0;

}

