#include <stdio.h>

#define SIZE 10

int binarySearch(int arr[], int size, int quary);

int main() {

 int a [] = {-5,-3,0,4,8,11,22,56,57,97};

 printf("%d\n",binarySearch(a,SIZE,0));

 printf("%d\n",binarySearch(a,SIZE,-4));

 printf("%d\n",binarySearch(a,SIZE,8));

 printf("%d\n",binarySearch(a,SIZE,1));

 printf("%d\n",binarySearch(a,SIZE,-5));

 printf("%d\n",binarySearch(a,SIZE,9));

 printf("%d\n",binarySearch(a,SIZE,7));

 return 0;

}

int binarySearchRec(int arr[], int quary, int start, int end) {

 int middle;

 if (start > end)

 return -1;

 middle = (start + end) / 2;

 if (arr[middle] == quary)

 return middle;

 if (arr[middle] > quary)

 return binarySearchRec(arr,quary,start,middle-1);

 else

 return binarySearchRec(arr,quary,middle+1,end);

}

int binarySearch(int arr[], int size, int quary) {

 return binarySearchRec(arr,quary,0,size-1);

}

