Ex. No: 8b **Date: 29-11-2021**

RETURNING AN ARRAY AS ARGUMENT

PROBLEM GIVEN:

Write a C program to implement the following:
1. Define a function get_details. Get two arrays from the users - The first one contains the roll number and the second array contains their corresponding marks.
2. In the same function, Find the marks that are above 70. return the corresponding register numbers from array1 using pointers to main.
3. In main(), arrange the register numbers in ascending order.

ALGORITHM:

Step 1: Start

Step 2: Declare necessary variables and function get_details.

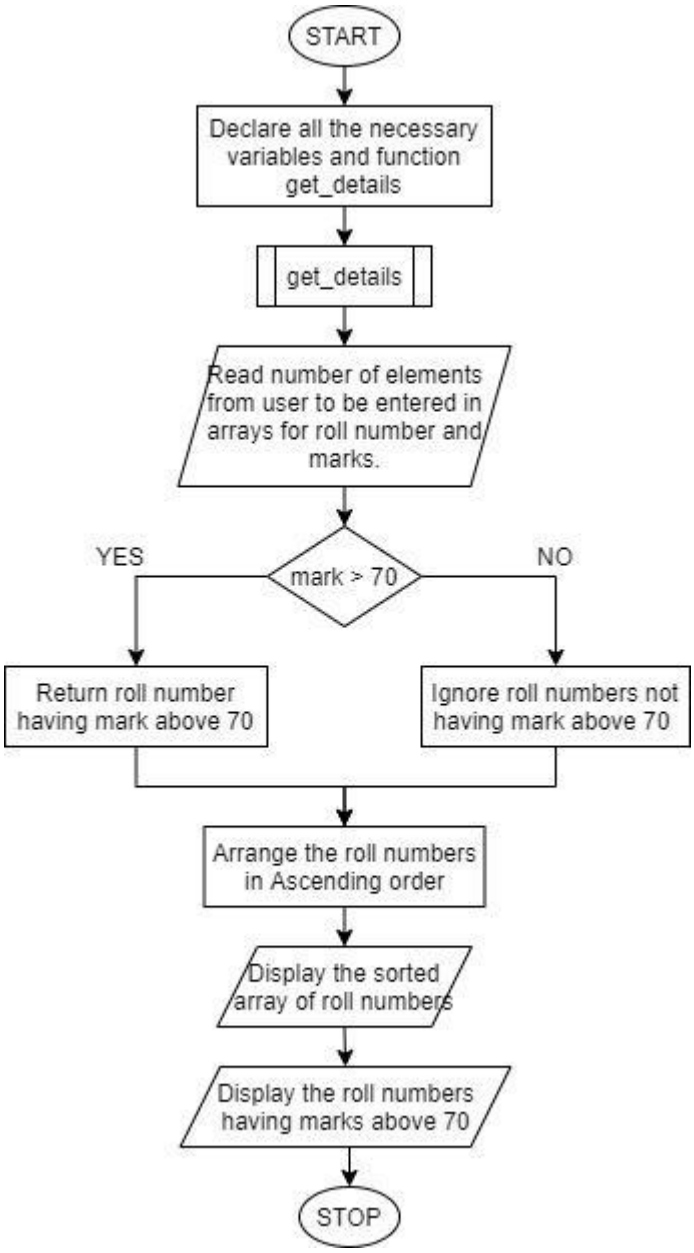
Step 3: Read number of elements from user to be entered in arrays for roll number and marks.

Step 4: Check if the marks are above 70. Those roll numbers having marks above 70 are returned to main function using pointers.

Step 5: In main function, arrange the roll numbers in ascending order.

Step 6: Print all necessary outputs

FLOWCHART:



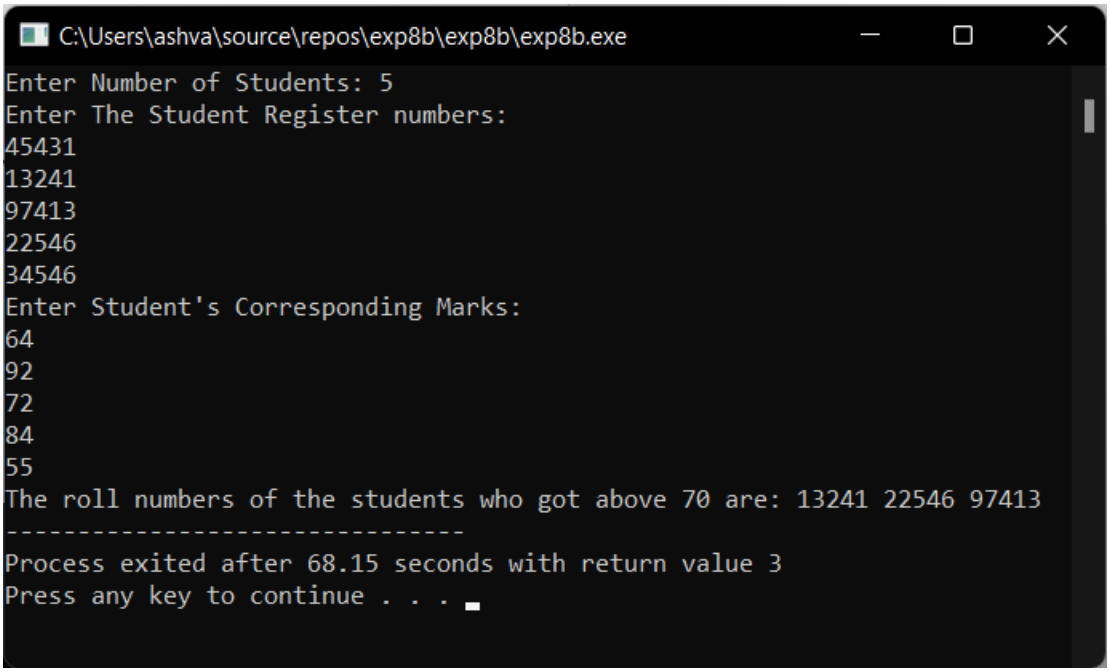
PROGRAM:

```
#include<stdio.h>
#include<stdlib.h>
```

```
int* get_details(int n){
    int i, j, roll[n], marks[n], *op;
    static int abv[10];
    printf("Enter The Student Register numbers: \n");
    for(i=0;i<n;i++){
        scanf("%d", &roll[i]);
    }
    printf("Enter Student's Corresponding Marks: \n");
    for(i=0;i<n;i++){
        scanf("%d", &marks[i]);
    }
    for(i=0, j=1;i<n;i++){
        if(marks[i] > 70){
            abv[j] = roll[i];
            j++;
        }
    }
    abv[0] = j-1;

    op = &abv[0];
    return op;
}

void main(){
    int i, j, n, x, arr[10], temp;
    int* ret;
    printf("Enter Number of Students: ");
    scanf("%d", &n);

    ret = get_details(n);
    x = *ret++;
    for(i=0;i<x;i++){
        arr[i] = *ret++;
    }
    for(i=0;i<x;i++){
        for(j=i+1;j<x;j++){
            if(arr[i] > arr[j]){
                temp = arr[i];
                arr[i] = arr[j];
                arr[j] = temp;
            }
        }
    }
    printf("The roll numbers of the students who got above 70 are: ");
    for(i=0;i<x;i++){
        printf("%d ", arr[i]);
```

```
    }
}
```

OTUPUT:


C:\Users\ashva\source\repos\exp8b\exp8b\exp8b.exe
Enter Number of Students: 5
Enter The Student Register numbers:
45431
13241
97413
22546
34546
Enter Student's Corresponding Marks:
64
92
72
84
55
The roll numbers of the students who got above 70 are: 13241 22546 97413

Process exited after 68.15 seconds with return value 3
Press any key to continue . . .