GROUP ASSIGNMENT (20%)

Write a complete program to allow the user to input students' name and mark, display the keyed in data, search for specific data and filter data. Use the following requirements and sample input and output to write the program:

i. Create a structure named *record* with the following members:

name : stringmark : integer

ii. In **main()** function:

- Create an array type structure named *student* with 5 elements.
- Use for loop statement to input the five students' name and mark into array student.
- Display the menu. Refer to the sample output.
- Use *do while loop*:
 - Prompt the user to enter option.
 - Use *switch* statement and call function accordingly based on the option input by user.
 - \triangleright if option is 1 call function Display(...) and send the array *student* as argument.
 - \triangleright if option is 2 call function *Search(...)* and send the array *student* as argument.
 - \triangleright if option is 3 call function Filter(...) and send the array *student* as argument.
 - Repeat the process as long as the user wants to continue.

iii. In **Display(...)** function:

• Use *for loop* statement to display all the students' *name* and *mark*.

iv. In **Search(...)** function:

- Prompt the user to input name to *search*.
- Use *for loop* statement and *strcmp(...)* to *search* the name by comparing the *name* in the array *student*.
- If the data is found, display "Data found" together with the name and mark, else display "Data not found".

v. In **Filter(...)** function:

- Prompt the user to input *start* mark and *end* mark.
- Use for loop and if statement to filter the data based on the start and the end mark.
- Display students' *name* and *mark* which are in the range of the *start* and the *end* mark.

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Sample output : (Bold values are input from user)
Student #1
Enter name : John
Enter mark : 90
Student #2
Enter name : Megan
Enter mark : 75
Student #3
Enter name : Susan
Enter mark : 80
Student #4
Enter name : Jimmy
Enter mark : 82
Student #5
Enter name : Tony
Enter mark : 70
Menu
1. Display data
2. Search data
3. Filter data
Choose option \langle 1, 2, 3 \rangle: 1
Students Record
John
        90
           75
Megan
          80
Susan
           82
Jimmy
           70
Tony
Do you want to continue ? <Y-Yes N-No> : Y
Choose option \langle 1, 2, 3 \rangle : 2
Enter name to search : Jimmy
Data found.
Name : Jimmy
Mark : 82
Do you want to continue ? <Y-Yes N-No> : Y
Choose option \langle 1, 2, 3 \rangle : 3
Enter start mark: 75
Enter end mark : 85
Student records with mark between 75 and 85
         75
Megan
          80
Susan
          82
Jimmy
Do you want to continue ? <Y-Yes N-No> : N
Thank you.
```

EVALUATION FORM (20 Marks)

Id	Name

No	Item	Mark
1.	Coding	/ 18
2.	Comments (0=>Null 1=>Poor 2=>Good)	/ 2

^{**}Copy and Paste the code here. Save this document as PDF File.