“**STUDENT MANAGEMENT SYSTEM”**

INDRODUCTION:

1. Store the first name of the student
2. Store the last name of the student.
3. Store the unique roll number for every student
4. Store the CGPA of every student
5. Store the courses registration by the student

**Add Student Details:** Get data from user and add a student to the list of students. While adding the students into the list, check for the uniqueness of the roll number.

**Find the student by the given roll number:** This function is to find the student record for the given roll number and print the details.

**Find the student by the given first name:** This function is to find all the students with the given first name and print their details.

**Find the students registered in a course:** This function is to find all the students who have registered for a given course.

**Count of Students:** This function is to print the total number of students in the system

**Delete a student:** This function is to delete the student record for the given roll number.

**Update Student:** This function is to update the student records. This function does not ask for new details for all fields but the user should be able to pick and choose what he wants to update.

Add

Find by Roll No

Find by Name

Find registered student

Count

Delete

Update

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| --- |
| // Func |

## **CODE**

#include <math.h>

#include <stdio.h>

#include <stdlib.h>

#include <string.h>

// Variable to keep track of

// number of students

int i = 0;

// Structure to store the student

struct sinfo {

char fname[50];

char lname[50];

int roll;

float cgpa;

int cid[10];

} st[55];

// Function to add the student

void add\_student()

{

printf("Add the Students Details\n");

printf("-------------------------\n");

printf("Enter the first "

"name of student\n");

scanf("%s", st[i].fname);

printf("Enter the last name"

" of student\n");

scanf("%s", st[i].lname);

printf("Enter the Roll Number\n");

scanf("%d", &st[i].roll);

printf("Enter the CGPA "

"you obtained\n");

scanf("%f", &st[i].cgpa);

printf("Enter the course ID"

" of each course\n");

for (int j = 0; j < 5; j++) {

scanf("%d", &st[i].cid[j]);

}

i = i + 1;

}

// Function to find the student

// by the roll number

void find\_rl()

{

int x;

printf("Enter the Roll Number"

" of the student\n");

scanf("%d", &x);

for (int j = 1; j <= i; j++) {

if (x == st[i].roll) {

printf(

"The Students Details are\n");

printf(

"The First name is %s\n",

st[i].fname);

printf(

"The Last name is %s\n",

st[i].lname);

printf(

"The CGPA is %f\n",

st[i].cgpa);

printf(

"Enter the course ID"

" of each course\n");

}

for (int j = 0; j < 5; j++) {

printf(

"The course ID are %d\n",

st[i].cid[j]);

}

break;

}

}

// Function to find the student

// by the first name

void find\_fn()

{

char a[50];

printf("Enter the First Name"

" of the student\n");

scanf("%s", a);

int c = 0;

for (int j = 1; j <= i; j++) {

if (!strcmp(st[j].fname, a)) {

printf(

"The Students Details are\n");

printf(

"The First name is %s\n",

st[i].fname);

printf(

"The Last name is %s\n",

st[i].lname);

printf(

"The Roll Number is %d\n ",

st[i].roll);

printf(

"The CGPA is %f\n",

st[i].cgpa);

printf(

"Enter the course ID of each course\n");

for (int j = 0; j < 5; j++) {

printf(

"The course ID are %d\n",

st[i].cid[j]);

}

c = 1;

}

else

printf(

"The First Name not Found\n");

}

}

// Function to find

// the students enrolled

// in a particular course

void find\_c()

{

int id;

printf("Enter the course ID \n");

scanf("%d", &id);

int c = 0;

for (int j = 1; j <= i; j++) {

for (int d = 0; d < 5; d++) {

if (id == st[j].cid[d]) {

printf(

"The Students Details are\n");

printf(

"The First name is %s\n",

st[i].fname);

printf(

"The Last name is %s\n",

st[i].lname);

printf(

"The Roll Number is %d\n ",

st[i].roll);

printf(

"The CGPA is %f\n",

st[i].cgpa);

c = 1;

break;

}

else

printf(

"The First Name not Found\n");

}

}

}

// Function to print the total

// number of students

void tot\_s()

{

printf("The total number of"

" Student is %d\n",

i);

printf("\n you can have a "

"max of 50 students\n");

printf("you can have %d "

"more students\n",

50 - i);

}

// Function to delete a student

// by the roll number

void del\_s()

{

int a;

printf("Enter the Roll Number"

" which you want "

"to delete\n");

scanf("%d", &a);

for (int j = 1; j <= i; j++) {

if (a == st[j].roll) {

for (int k = j; k < 49; k++)

st[k] = st[k + 1];

i--;

}

}

printf("The Roll Number"

" is removed Successfully\n");

}

// Function to update a students data

void up\_s()

{

printf("Enter the roll number"

" to update the entry : ");

long int x;

scanf("%ld", &x);

for (int j = 0; j < i; j++) {

if (st[j].roll == x) {

printf("1. first name\n"

"2. last name\n"

"3. roll no.\n"

"4. CGPA\n"

"5. courses\n");

int z;

scanf("%d", &z);

switch (z) {

case 1:

printf("Enter the new "

"first name : \n");

scanf("%s", st[j].fname);

break;

case 2:

printf("Enter the new "

"last name : \n");

scanf("%s", st[j].lname);

break;

case 3:

printf("Enter the new "

"roll number : \n");

scanf("%d", &st[j].roll);

break;

case 4:

printf("Enter the new CGPA : \n");

scanf("%f", &st[j].cgpa);

break;

case 5:

printf("Enter the new courses \n");

scanf(

"%d%d%d%d%d", &st[j].cid[0],

&st[j].cid[1], &st[j].cid[2],

&st[j].cid[3], &st[j].cid[4]);

break;

}

printf("UPDATED SUCCESSFULLY.\n");

}

}

}

// Driver code

void main()

{

int choice, count;

while (i = 1) {

printf("The Task that you "

"want to perform\n");

printf("1. Add the Student Details\n");

printf("2. Find the Student "

"Details by Roll Number\n");

printf("3. Find the Student "

"Details by First Name\n");

printf("4. Find the Student "

"Details by Course Id\n");

printf("5. Find the Total number"

" of Students\n");

printf("6. Delete the Students Details"

" by Roll Number\n");

printf("7. Update the Students Details"

" by Roll Number\n");

printf("8. To Exit\n");

printf("Enter your choice to "

"find the task\n");

scanf("%d", &choice);

switch (choice) {

case 1:

add\_student();

break;

case 2:

find\_rl();

break;

case 3:

find\_fn();

break;

case 4:

find\_c();

break;

case 5:

tot\_s();

break;

case 6:

del\_s();

break;

case 7:

up\_s();

break;

case 8:

exit(0);

break;

}

}

}

**OUTPUT:**

The Task that you want to perform

1. Add the Student Details

2. Find the Student Details by Roll Number

3. Find the Student Details by First Name

4. Find the Student Details by Course Id

5. Find the Total number of Students

6. Delete the Students Details by Roll Number

7. Update the Students Details by Roll Number

8. TO Exit Enter

your choice to find the task 1 Add the Students Details

————————-

Enter the first name of student RahulS

Enter the last name of student Kumar

Enter the Roll Number 1 Enter the CGPA you obtained 8

Enter the course ID of each course 1 2 3 4 5

The Task that you want to perform

1. Add the Student Details

2. Find the Student Details by Roll Number

3. Find the Student Details by First Name

4. Find the Student Details by Course Id

5. Find the Total number of Students

6. Delete the Students Details by Roll Number

7. Update the Students Details by Roll Number

8. TO Exit