c program to store information of a student using union

#include <stdio.h>

union StudentInfo {

char name[50];

int rollNumber;

float marks;

};

struct Student {

int studentID;

char grade;

union StudentInfo info;

};

int main() {

struct Student student1;

printf("Enter student ID: ");

scanf("%d", &student1.studentID);

printf("Enter grade: ");

scanf(" %c", &student1.grade);

printf("Enter 'N' for name, 'R' for roll number, 'M' for marks: ");

char choice;

scanf(" %c", &choice);

switch (choice) {

case 'N':

printf("Enter name: ");

scanf("%s", student1.info.name);

break;

case 'R':

printf("Enter roll number: ");

scanf("%d", &student1.info.rollNumber);

break;

case 'M':

printf("Enter marks: ");

scanf("%f", &student1.info.marks);

break;

default:

printf("Invalid choice.\n");

return 1; // Exit the program with an error code

}

printf("\nStudent Information:\n");

printf("Student ID: %d\n", student1.studentID);

printf("Grade: %c\n", student1.grade);

switch (choice) {

case 'N':

printf("Name: %s\n", student1.info.name);

break;

case 'R':

printf("Roll Number: %d\n", student1.info.rollNumber);

break;

case 'M':

printf("Marks: %.2f\n", student1.info.marks);

break;

}

return 0;

}