Store and retrieve the name of the students and obtained marks in c programming in 1st semester using structure.

```
#include <stdio.h>
// header file for console input output
// basic data structure;
struct student
{
  char name[20];
  int marks;
};
/**********
 *
 * Stores new student name and marks in file
 *
 * \param filename
 *********/
int store(char* filename)
{
  // opening file in appending mode
  FILE* fp = fopen(filename,"a+");
  // checking if the file is available
  if (fp == NULL)
    {
      fprintf(stderr,"could not open the file");
      return -1;
    }
  // decalaring struct variable
  struct student student;
  // temp variable
  char ans;
  do
    {
      // asking user for student infromation
      printf("Enter the name of the student");
      scanf(" %s",student.name);
      printf("Enter the marks obtained by student in computer science");
      scanf(" %d",&student.marks);
      // writing the student to the file
      fprintf(fp,"%s %d",student.name,student.marks);
```

```
    printf("Press y to continue\n");
    // asking if user want to continue updating the record
    scanf(" %c",&ans);
   }
  while( ans == 'y');
  fclose(fp);
  return 0;
}
/********
 *
 * retrives the student record from the file
 *
 * \params filename
 ********/
int retrive(char* filename)
{
  // temprorary struct
  struct student student;
  // opening the file in read mode
  FILE* fp = fopen(filename, "r");
  // checking if file was sucessfully opened
  if ( fp == NULL)
   {
    fprintf(stderr,"Could not open the file");
    return -1;
   }
  // getting the each input and printing them out
  while( 1 )
   {
    fscanf(fp,"%s %d",student.name,&student.marks);
    printf("Student Name %s\n",student.name);
    printf("Student Marks %d\n",student.marks);
    printf("\n");
    if (feof(fp))
        break;
   }
  return 0;
}
int main()
{
```

```
 // getting user option
 char filename[50];
 printf("Enter the filename");
 scanf(" %s",filename);
 printf("What do you want to do:\n");
 printf("1. Store data\n");
 printf("2. Retrive data\n");
 int choice;
 scanf(" %d",&choice);
 switch(choice)
  {
  case 1:
    store(filename);
        break;
  case 2:
    retrive(filename);
        break;
  default:
   return -3;
  }
 return 0;
}

#include<stdio.h>//or
#include<windows.h>
struct data
{
   char name[10];
   int marks;
};
int main()
{
   int NoOfStudents;
   int i;
   printf("Enter no of students whose data is to be added:\t");
   scanf("%d",&NoOfStudents);
   struct data std[NoOfStudents];
   for(i=0;i<NoOfStudents;i++)
   {
      printf("Enter name for student %d:\t",i+1);
```

```
        scanf(" %[^\n]s",&std[i].name);
        printf("Enter marks for C:\t");
        scanf("%d",&std[i].marks);
    }
    system("cls");
    for(i=0;i<NoOfStudents;i++)
    {
        printf("Name: %s\n",std[i].name);
        printf("Marks in C: %d\n",std[i].marks);
    }
}
```