**Structure Program.**

**Write a program to create structure student having members rno,name,add,age,marks of 3 subjects, and sum. Accept value from user and display the same for 3 students using array of structure.**

#include<stdio.h>

#include<conio.h>

struct student

{

int rno;

char name[20];

char add[20];

int age;

int m[3];

int sum;

}s[3];

void main()

{

int i,j;

clrscr();

printf("Enter the value in structure" );

for(i=0;i<3;i++)

{

printf("\n\tEnter the details for student s[%d]",i+1);

printf("\nEnter Roll no of student: ");

scanf("%d",&s[i].rno); fflush(stdin);

printf("\n Enter the name of strudent: " );

gets(s[i].name);fflush(stdin);

printf("\n Enter the address of student: ");

gets(s[i].add);

printf("\n Enter the age of student: ");

scanf("%d",&s[i].age);

for(j=0;j<3;j++)

{

printf("\n Enter marks of subject [%d]: ",j+1);

scanf("%d",&s[i].m[j]);

s[i].sum=s[i].sum +s[i].m[j];

}

printf("\n TOTAL OF ALL SUBJECT OF STUDENT [%d] is = %d ",i+1,s[i].sum);

}

getch();

}

**With a reference to above program modify a program in a way that it will display record of those students whose avg is greater than or equal to 60.**

#include<stdio.h>

#include<conio.h>

struct student

{

int rno;

char name[20];

char add[20];

int age;

int m[3];

int sum;

float avg;

}s[3];

void main()

{

int i,j;

clrscr();

printf("Enter the value in structure" );

for(i=0;i<3;i++)

{

printf("\n\tEnter the details for student s[%d]",i+1);

printf("\nEnter Roll no of student: ");

scanf("%d",&s[i].rno); fflush(stdin);

printf("\n Enter the name of strudent: " );

gets(s[i].name);fflush(stdin);

printf("\n Enter the address of student: ");

gets(s[i].add);

printf("\n Enter the age of student: ");

scanf("%d",&s[i].age);

for(j=0;j<3;j++)

{

printf("\n Enter marks of subject [%d]: ",j+1);

scanf("%d",&s[i].m[j]);

s[i].sum=s[i].sum +s[i].m[j];

}

s[i].avg=s[i].sum/3.0;

}

for(i=0;i<3;i++)

{

printf("\nDetails of student whose avg > 60");

if(s[i].avg>60)

{

printf("\n the details for student s[%d]",i+1);

printf("\n Roll no of student:%d",s[i].rno);

printf("\n the name of strudent:%s ",s[i].name);

printf("\n Enter the address of student: %s",s[i].add);

printf("\n Enter the age of student: %d",s[i].age);

for(j=0;j<3;j++)

{

printf("\n marks of subject [%d]: ",j+1);

printf("%d",s[i].m[j]);

}

}

}

getch();

}

**Write a program to create structure cricket having members name, team name, run,and avg. Accept value from user and display the same for 3 cricketers using array of structure.**

#include<stdio.h>

#include<conio.h>

struct cricket

{

char name[20];

char team[20];

int run;

float avg;

}c[3];

int main()

{

int i,j;

printf("Enter the value in cricket" );

for(i=0;i<3;i++)

{

printf("\n\tEnter the details for cricketer c[%d]",i+1);

printf("\nEnter name of cricketer: ");fflush(stdin);

gets(c[i].name); fflush(stdin);

printf("\n Enter the team name : " );

gets(c[i].team);fflush(stdin);

printf("\n Enter the run of cricket: ");

scanf("%d",&c[i].run);

printf("\n Enter the avg of cricketer: ");

scanf("%f",&c[i].avg);

}

for(i=0;i<3;i++)

{

printf("\n\tEnter the details for cricketer c[%d]",i+1);

printf("\n name of cricketer:%s ",c[i].name);

printf("\n the team name : %s ",c[i].team);

printf("\n Enter the run of cricket: %d",c[i].run);

printf("\n the avg of cricketer: %f",c[i].avg);

}

getch();

return 0;

}

**Write a program that will explain use of structure pointer.**

#include<stdio.h>

#include<conio.h>

#include<stdlib.h>

struct student

{

int rno;

char name[20];

}\*s;

int main()

{

int i,n;

//clrscr();

scanf("%d",&n);

s= (struct student\*)malloc (n\* sizeof(struct student));

for(i=0;i<n;i++)

{

printf(" Enter the roll no ");

scanf("%d",&s->rno);

printf("Enter the name : ");

fflush(stdin);

gets(s->name);

s++;

}

s=s-n;

for(i=0;i<n;i++)

{

printf("\nRoll no =%d",s->rno);

printf("\n Name = %s",s->name);

s++;

}

getch();

return 0;

}

**Write a Program to explain use of nested structure**

#include<stdio.h>

struct per\_info

{

char city[20];

long int p\_n;

};

struct student

{

int rno;

char name[20];

int age;

struct per\_info p;

}s;

void main()

{

printf("\nEnter Roll no of student: ");

scanf("%d",&s.rno);

fflush(stdin);

printf("\n Enter the name of strudent: " );

gets(s.name);

printf("\n Enter the age of student: ");

scanf("%d",&s.age);

fflush(stdin);

printf("\n Enter the city of student: ");

gets(s.p.city);

printf("\n Enter the Parents number of student: ");

scanf("%ld",&s.p.p\_n);

printf("\n\nthe details for student");

printf("\n Roll no of student:%d",s.rno);

printf("\nthe name of strudent:%s ",s.name);

printf("\nthe age of student: %d",s.age);

printf("\nthe city of student: %s",s.p.city);

printf("\nthe age of student: %ld",s.p.p\_n);

}