ASSIGNMENT-10

SUNITI RAJANANDINI SAMAL

REGNO-2061020071

1. Enter the marks of 5 students in Chemistry, Mathematics and Physics (each out of

**100) using a structure named Marks having elements roll no., name, chem\_marks,**

**maths\_marks and phy\_marks and then display the percentage of each student.**

**The problem statements need to be programmed by**

**(i) using structure variable**

**(ii) using typedef**

**(iii) using array of structures**

(iv) using nested structure

**(v) passing structure to function**

**(vi) using union variable**

**Ans:-**

**i) using structure variable**

**Program:-**

#include <stdio.h>

#include<string.h>

struct mark

{

int rn;

char name[14];

float phy,chem,math;

float per;

}m1,m2,m3,m4,m5;

int main() {

int percentage ;

printf("ENTER DETAILS OF FIRST STUDENT.....\n");

printf("enter the roll no student: ");

scanf("%d",&m1.rn);

printf("Name of the student: ");

scanf("%s",m1.name);

printf("enter marks of physics: ");

scanf("%f",&m1.phy);

printf("enter marks of chemistry: ");

scanf("%f",&m1.chem);

printf("enter marks of mathematics: ");

scanf("%f",&m1.math);

printf("\nENTER DETAILS OF SECOND STUDENT.....\n");

printf("enter the roll no student: ");

scanf("%d",&m2.rn);

printf("Name of the student: ");

scanf("%s",m2.name);

printf("enter marks of physics: ");

scanf("%f",&m2.phy);

printf("enter marks of chemistry: ");

scanf("%f",&m2.chem);

printf("enter marks of mathematics: ");

scanf("%f",&m2.math);

printf("\nENTER DETAILS OF THIRD STUDENT.....\n");

printf("enter the roll no student: ");

scanf("%d",&m3.rn);

printf("Name of the student: ");

scanf("%s",m3.name);

printf("enter marks of physics: ");

scanf("%f",&m3.phy);

printf("enter marks of chemistry: ");

scanf("%f",&m3.chem);

printf("enter marks of mathematics: ");

scanf("%f",&m3.math);

printf("\nENTER DETAILS OF FOURTH STUDENT.....\n");

printf("enter the roll no student: ");

scanf("%d",&m4.rn);

printf("Name of the student: ");

scanf("%s",m4.name);

printf("enter marks of physics: ");

scanf("%f",&m4.phy);

printf("enter marks of chemistry: ");

scanf("%f",&m4.chem);

printf("enter marks of mathematics: ");

scanf("%f",&m4.math);

printf("\nENTER DETAILS OF FIFTH STUDENT.....\n");

printf("enter the roll no student: ");

scanf("%d",&m5.rn);

printf("Name of the student: ");

scanf("%s",m5.name);

printf("enter marks of physics: ");

scanf("%f",&m5.phy);

printf("enter marks of chemistry: ");

scanf("%f",&m5.chem);

printf("enter marks of mathematics: ");

scanf("%f",&m5.math);

m1.per= (m1.phy +m1.chem +m1.math)/300 \*100;

m2.per= (m2.phy +m2.chem +m2.math)/300 \*100;

m3.per= (m3.phy +m3.chem +m3.math)/300 \*100;

m4.per= (m4.phy +m4.chem +m4.math)/300 \*100;

m5.per= (m5.phy +m5.chem +m5.math)/300 \*100;

printf("\nPercentage secured by first student is : %f ",m1.per);

printf("\nPercentage secured by second student is : %f ",m2.per);

printf("\nPercentage secured by third student is : %f ",m3.per);

printf("\nPercentage secured by fourth student is : %f ",m4.per);

printf("\nPercentage secured by fifth student is : %f ",m5.per);

return 0;

}

**Output:-**

ENTER DETAILS OF FIRST STUDENT.....

enter the roll no student: 1

Name of the student: a

enter marks of physics: 60

enter marks of chemistry: 70

enter marks of mathematics: 80

ENTER DETAILS OF SECOND STUDENT.....

enter the roll no student: 2

Name of the student: b

enter marks of physics: 55

enter marks of chemistry: 65

enter marks of mathematics: 44

ENTER DETAILS OF THIRD STUDENT.....

enter the roll no student: 3

Name of the student: c

enter marks of physics: 99

enter marks of chemistry: 47

enter marks of mathematics: 78

ENTER DETAILS OF FOURTH STUDENT.....

enter the roll no student: 4

Name of the student: c

enter marks of physics: 66

enter marks of chemistry: 22

enter marks of mathematics: 33

ENTER DETAILS OF FIFTH STUDENT.....

enter the roll no student: 5

Name of the student: l

enter marks of physics: 44

enter marks of chemistry: 55

enter marks of mathematics: 6

Percentage secured by first student is : 70.000000

Percentage secured by second student is : 54.666668

Percentage secured by third student is : 74.666664

Percentage secured by fourth student is : 40.333332

Percentage secured by fifth student is : 35.000000

**ii) using typedef**

**program:-**

#include <stdio.h>

#include<string.h>

typedef struct mark

{

int rn;

char name[14];

float phy,chem,math;

float per;

}m ;

m m1,m2,m3,m4,m5;

int main() {

int percentage ;

printf("ENTER DETAILS OF FIRST STUDENT.....\n");

printf("enter the roll no student: ");

scanf("%d",&m1.rn);

printf("Name of the student: ");

scanf("%s",m1.name);

printf("enter marks of physics: ");

scanf("%f",&m1.phy);

printf("enter marks of chemistry: ");

scanf("%f",&m1.chem);

printf("enter marks of mathematics: ");

scanf("%f",&m1.math);

printf("\nENTER DETAILS OF SECOND STUDENT.....\n");

printf("enter the roll no student: ");

scanf("%d",&m2.rn);

printf("Name of the student: ");

scanf("%s",m2.name);

printf("enter marks of physics: ");

scanf("%f",&m2.phy);

printf("enter marks of chemistry: ");

scanf("%f",&m2.chem);

printf("enter marks of mathematics: ");

scanf("%f",&m2.math);

printf("\nENTER DETAILS OF THIRD STUDENT.....\n");

printf("enter the roll no student: ");

scanf("%d",&m3.rn);

printf("Name of the student: ");

scanf("%s",m3.name);

printf("enter marks of physics: ");

scanf("%f",&m3.phy);

printf("enter marks of chemistry: ");

scanf("%f",&m3.chem);

printf("enter marks of mathematics: ");

scanf("%f",&m3.math);

printf("\nENTER DETAILS OF FOURTH STUDENT.....\n");

printf("enter the roll no student: ");

scanf("%d",&m4.rn);

printf("Name of the student: ");

scanf("%s",m4.name);

printf("enter marks of physics: ");

scanf("%f",&m4.phy);

printf("enter marks of chemistry: ");

scanf("%f",&m4.chem);

printf("enter marks of mathematics: ");

scanf("%f",&m4.math);

printf("\nENTER DETAILS OF FIFTH STUDENT.....\n");

printf("enter the roll no student: ");

scanf("%d",&m5.rn);

printf("Name of the student: ");

scanf("%s",m5.name);

printf("enter marks of physics: ");

scanf("%f",&m5.phy);

printf("enter marks of chemistry: ");

scanf("%f",&m5.chem);

printf("enter marks of mathematics: ");

scanf("%f",&m5.math);

m1.per= (m1.phy +m1.chem +m1.math)/300 \*100;

m2.per= (m2.phy +m2.chem +m2.math)/300 \*100;

m3.per= (m3.phy +m3.chem +m3.math)/300 \*100;

m4.per= (m4.phy +m4.chem +m4.math)/300 \*100;

m5.per= (m5.phy +m5.chem +m5.math)/300 \*100;

printf("\nPercentage secured by first student is : %f ",m1.per);

printf("\nPercentage secured by second student is : %f ",m2.per);

printf("\nPercentage secured by third student is : %f ",m3.per);

printf("\nPercentage secured by fourth student is : %f ",m4.per);

printf("\nPercentage secured by fifth student is : %f ",m5.per);

return 0;

}

**Out put:-**

ENTER DETAILS OF FIRST STUDENT.....

enter the roll no student: 1

Name of the student: a

enter marks of physics: 60

enter marks of chemistry: 70

enter marks of mathematics: 80

ENTER DETAILS OF SECOND STUDENT.....

enter the roll no student: 2

Name of the student: b

enter marks of physics: 55

enter marks of chemistry: 65

enter marks of mathematics: 44

ENTER DETAILS OF THIRD STUDENT.....

enter the roll no student: 3

Name of the student: c

enter marks of physics: 99

enter marks of chemistry: 47

enter marks of mathematics: 78

ENTER DETAILS OF FOURTH STUDENT.....

enter the roll no student: 4

Name of the student: c

enter marks of physics: 66

enter marks of chemistry: 22

enter marks of mathematics: 33

ENTER DETAILS OF FIFTH STUDENT.....

enter the roll no student: 5

Name of the student: l

enter marks of physics: 44

enter marks of chemistry: 55

enter marks of mathematics: 6

Percentage secured by first student is : 70.000000

Percentage secured by second student is : 54.666668

Percentage secured by third student is : 74.666664

Percentage secured by fourth student is : 40.333332

Percentage secured by fifth student is : 35.000000

**(iii) using array of structures**

**Program:-**

#include <stdio.h>

#include<string.h>

struct mark

{

int rn;

char name[14];

float phy,chem,math;

float per;

}m[5];

int main() {

int i ;

printf("ENTER DETAILS OF STUDENT.....\n");

for (i=1;i<=5;i++)

{

printf("enter the roll no of %d student: \n",i);

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

printf("Name of the student: ");

scanf("%s",m[i].name);

printf("\nenter marks of physics: ");

scanf("%f",&m[i].phy);

printf("enter marks of chemistry: ");

scanf("%f",&m[i].chem);

printf("enter marks of mathematics: ");

scanf("%f",&m[i].math);

}

for(i=1;i<=5;i++)

{

m[i].per=(m[i].phy+m[i].chem+m[i].math)/300 \* 100;

printf("\nPercentage secured by student %d is : %f ",i,m[i].per);

}

return 0;

}

**Out put:-**

ENTER DETAILS OF STUDENT.....

enter the roll no of 1 student: 1

Name of the student: a

enter marks of physics: 50

enter marks of chemistry: 60

enter marks of mathematics: 70

enter the roll no of 2 student: 2

Name of the student: b

enter marks of physics: 51

enter marks of chemistry: 52

enter marks of mathematics: 53

enter the roll no of 3 student: c

Name of the student: enter marks of physics: 62

enter marks of chemistry: 63

enter marks of mathematics: 64

enter the roll no of 4 student: d

Name of the student: enter marks of physics: 55

enter marks of chemistry: 56

enter marks of mathematics: 66

enter the roll no of 5 student: e

Name of the student: e

enter marks of physics: 44

enter marks of chemistry: 45

enter marks of mathematics: 45

Percentage secured by student 1 is : 60.000000

Percentage secured by student 2 is : 52.000000

Percentage secured by student 3 is : 63.000000

Percentage secured by student 4 is : 59.000000

Percentage secured by student 5 is : 44.666668

**(iv) using nested structure**

**Program:-**

#include <stdio.h>

#include<string.h>

struct student

{

struct mark

{

int rn;

char name[14];

float phy,chem,math;

float per;

}m;

}s[5];

int main() {

int i ;

printf("ENTER DETAILS OF STUDENT.....\n");

for (i=1;i<=5;i++)

{

printf("\nenter the roll no of %d student:",i);

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

printf("Name of the student: ");

scanf("%s",s[i].m.name);

printf("\nenter marks of physics: ");

scanf("%f",&s[i].m.phy);

printf("enter marks of chemistry: ");

scanf("%f",&s[i].m.chem);

printf("enter marks of mathematics: ");

scanf("%f",&s[i].m.math);

}

for(i=1;i<=5;i++)

{

s[i].m.per=(s[i].m.phy+s[i].m.chem+s[i].m.math)/300 \* 100;

printf("\nPercentage secured by student %d is : %f ",i,s[i].m.per);

}

return 0;

}

**Output:-**

ENTER DETAILS OF STUDENT.....

enter the roll no of 1 student:1

Name of the student: a

enter marks of physics: 40

enter marks of chemistry: 50

enter marks of mathematics: 60

enter the roll no of 2 student:2

Name of the student: b

enter marks of physics: 45

enter marks of chemistry: 55

enter marks of mathematics: 65

enter the roll no of 3 student:3

Name of the student: c

enter marks of physics: 51

enter marks of chemistry: 52

enter marks of mathematics: 39

enter the roll no of 4 student:4

Name of the student: d

enter marks of physics: 56

enter marks of chemistry: 58

enter marks of mathematics: 64

enter the roll no of 5 student:5

Name of the student: e

enter marks of physics: 89

enter marks of chemistry: 66

enter marks of mathematics: 74

Percentage secured by student 1 is : 50.000000

Percentage secured by student 2 is : 55.000000

Percentage secured by student 3 is : 47.333332

Percentage secured by student 4 is : 59.333332

Percentage secured by student 5 is : 76.333328

**(v) passing structure to function**

**Program:-**

#include <stdio.h>

#include<string.h>

struct student

{

struct mark

{

int rn;

char name[14];

float phy,chem,math;

float per;

}m;

}s[5];

void show(struct student s[]);

int main() {

int i ;

printf("ENTER DETAILS OF STUDENT.....\n");

for (i=1;i<=5;i++)

{

printf("\nenter the roll no of %d student:",i);

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

printf("Name of the student: ");

scanf("%s",s[i].m.name);

printf("\nenter marks of physics: ");

scanf("%f",&s[i].m.phy);

printf("enter marks of chemistry: ");

scanf("%f",&s[i].m.chem);

printf("enter marks of mathematics: ");

scanf("%f",&s[i].m.math);

}

show(s);

return 0;

}

void show(struct student s[5])

{

int i;

for(i=1;i<=5;i++)

{

s[i].m.per=(s[i].m.phy+s[i].m.chem+s[i].m.math)/300 \* 100;

printf("\nPercentage secured by student %d is : %f ",i,s[i].m.per);

}

return 0;

}

**Output:-**

ENTER DETAILS OF STUDENT.....

enter the roll no of 1 student:1

Name of the student: a

enter marks of physics: 50

enter marks of chemistry: 50

enter marks of mathematics: 50

enter the roll no of 2 student:2

Name of the student: b

enter marks of physics: 50

enter marks of chemistry: 50

enter marks of mathematics: 50

enter the roll no of 3 student:3

Name of the student: c

enter marks of physics: 50

enter marks of chemistry: 50

enter marks of mathematics: 50

enter the roll no of 4 student:4

Name of the student: d

enter marks of physics: 50

enter marks of chemistry: 50

enter marks of mathematics: 50

enter the roll no of 5 student:e 5

Name of the student: e

enter marks of physics: 505

enter marks of chemistry: 50

enter marks of mathematics: 50

Percentage secured by student 1 is : 50.000000

Percentage secured by student 2 is : 50.000000

Percentage secured by student 3 is : 50.000000

Percentage secured by student 4 is : 50.000000

Percentage secured by student 5 is : 50.000000

**(vi) using union variable**

**Program:-**

#include <stdio.h>

#include<string.h>

union student

{

union mark

{

int rn;

char name[14];

float phy,chem,math;

float per;

}m;

}s[5];

int main() {

int i ;

printf("ENTER DETAILS OF STUDENT.....\n");

for (i=1;i<=5;i++)

{

printf("\nenter the roll no of %d student:",i);

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

printf("Name of the student: ");

scanf("%s",s[i].m.name);

printf("\nenter marks of physics: ");

scanf("%f",&s[i].m.phy);

printf("enter marks of chemistry: ");

scanf("%f",&s[i].m.chem);

printf("enter marks of mathematics: ");

scanf("%f",&s[i].m.math);

}

for(i=1;i<=5;i++)

{

s[i].m.per=(s[i].m.phy+s[i].m.chem+s[i].m.math)/300 \* 100;

printf("\nPercentage secured by student %d is : %f ",i,s[i].m.per);

}

return 0;

}

**Output:-**

ENTER DETAILS OF STUDENT.....

enter the roll no of 1 student:1

Name of the student: a

enter marks of physics: 50

enter marks of chemistry: 50

enter marks of mathematics: 50

enter the roll no of 2 student:2

Name of the student: b

enter marks of physics: 50

enter marks of chemistry: 50

enter marks of mathematics: 50

enter the roll no of 3 student:3

Name of the student: c

enter marks of physics: 50

enter marks of chemistry: 50

enter marks of mathematics: 50

enter the roll no of 4 student:4

Name of the student: d

enter marks of physics: 50

enter marks of chemistry: 50

enter marks of mathematics: 50

enter the roll no of 5 student:e 5

Name of the student: e

enter marks of physics: 505

enter marks of chemistry: 50

enter marks of mathematics: 50

Percentage secured by student 1 is : 50.000000

Percentage secured by student 2 is : 50.000000

Percentage secured by student 3 is : 50.000000

Percentage secured by student 4 is : 50.000000

Percentage secured by student 5 is : 50.000000

**2. Write a structure to store the roll no., name, age (between 11 to 14) and address**

**of students (more than 10). Store the information of the students.**

**- print the names of all the students having age 14.**

**- print the names of all the students having even roll no.**

**- display the details of the student whose roll no is given (i.e. roll no. entered by**

**the user).**

**The problem statements need to be programmed by**

**(i) using structure variable**

**(ii) using typedef**

**(iii) using array of structures**

**(iv) using nested structure**

**(v) passing structure to function**

**(vi) using union variable**

**Ans:-**

1. **using structure variable**

**program:-**

#include <stdio.h>

#include<string.h>

struct student

{

char name[25];

int rn;

int age;

char add[10];

};

int main()

{

int no;

struct student s1,s2,s3,s4,s5,s6,s7,s8,s9,s10;

printf("enter details of 1st sudent: ");

printf("\nEnter the roll no of student: ");

scanf("%d",&s1.rn);

printf("Enter Name of the student: ");

scanf("%s",s1.name);

printf("Enter age between 11-14: ");

scanf("%d",&s1.age);

printf("Enter Address: ");

scanf("%s",s1.add);

printf("enter details of 2nd sudent: ");

printf("\nEnter the roll no of student: ");

scanf("%d",&s2.rn);

printf("Enter Name of the student: ");

scanf("%s",s2.name);

printf("Enter age between 11-14: ");

scanf("%d",&s2.age);

printf("Enter Address: ");

scanf("%s",s2.add);

printf("enter details of 3rd sudent: ");

printf("\nEnter the roll no of student: ");

scanf("%d",&s3.rn);

printf("Enter Name of the student: ");

scanf("%s",s3.name);

printf("Enter age between 11-14: ");

scanf("%d",&s3.age);

printf("Enter Address: ");

scanf("%s",s3.add);

printf("enter details of 4th sudent: ");

printf("\nEnter the roll no of student: ");

scanf("%d",&s4.rn);

printf("Enter Name of the student: ");

scanf("%s",s4.name);

printf("Enter age between 11-14: ");

scanf("%d",&s4.age);

printf("Enter Address: ");

scanf("%s",s4.add);

printf("enter details of 5th sudent: ");

printf("\nEnter the roll no of student: ");

scanf("%d",&s5.rn);

printf("Enter Name of the student: ");

scanf("%s",s5.name);

printf("Enter age between 11-14: ");

scanf("%d",&s5.age);

printf("Enter Address: ");

scanf("%s",s5.add);

printf("enter details of 6th sudent: ");

printf("\nEnter the roll no of student: ");

scanf("%d",&s6.rn);

printf("Enter Name of the student: ");

scanf("%s",s6.name);

printf("Enter age between 11-14: ");

scanf("%d",&s6.age);

printf("Enter Address: ");

scanf("%s",s6.add);

printf("enter details of 7th sudent: ");

printf("\nEnter the roll no of student: ");

scanf("%d",&s7.rn);

printf("Enter Name of the student: ");

scanf("%s",s7.name);

printf("Enter age between 11-14: ");

scanf("%d",&s7.age);

printf("Enter Address: ");

scanf("%s",s7.add);

printf("enter details of 8th sudent: ");

printf("\nEnter the roll no of student: ");

scanf("%d",&s8.rn);

printf("Enter Name of the student: ");

scanf("%s",s8.name);

printf("Enter age between 11-14: ");

scanf("%d",&s8.age);

printf("Enter Address: ");

scanf("%s",s8.add);

printf("enter details of 9th sudent: ");

printf("\nEnter the roll no of student: ");

scanf("%d",&s9.rn);

printf("Enter Name of the student: ");

scanf("%s",s9.name);

printf("Enter age between 11-14: ");

scanf("%d",&s9.age);

printf("Enter Address: ");

scanf("%s",s9.add);

printf("enter details of 10thudent: ");

printf("\nEnter the roll no of student: ");

scanf("%d",&s10.rn);

printf("Enter Name of the student: ");

scanf("%s",s10.name);

printf("Enter age between 11-14: ");

scanf("%d",&s10.age);

printf("Enter Address: ");

scanf("%s",s10.add);

printf("\nyour entered student details are: \n");

printf("Roll no: %d \t Name: %s Age: %d Address: %s \n",s1.rn,s1.name,s1.age,s1.add);

printf("Roll no: %d \t Name: %s Age: %d Address: %s \n",s2.rn,s2.name,s2.age,s2.add);

printf("Roll no: %d \t Name: %s Age: %d Address: %s \n",s3.rn,s3.name,s3.age,s3.add);

printf("Roll no: %d \t Name: %s Age: %d Address: %s \n",s4.rn,s4.name,s4.age,s4.add);

printf("Roll no: %d \t Name: %s Age: %d Address: %s \n",s5.rn,s5.name,s5.age,s5.add);

printf("Roll no: %d \t Name: %s Age: %d Address: %s \n",s6.rn,s6.name,s6.age,s6.add);

printf("Roll no: %d \t Name: %s Age: %d Address: %s \n",s7.rn,s7.name,s7.age,s7.add);

printf("Roll no: %d \t Name: %s Age: %d Address: %s \n",s8.rn,s8.name,s8.age,s8.add);

printf("Roll no: %d \t Name: %s Age: %d Address: %s \n",s9.rn,s9.name,s9.age,s9.add);

printf("Roll no: %d \t Name: %s Age: %d Address: %s \n",s10.rn,s10.name,s10.age,s10.add);

printf("ENTER ROLL NO OF STUDENT TO GET DETAILS: ");

scanf("%d",&no);

if(no==s1.rn)

{

printf("Roll no: %d \t Name: %s Age: %d Address: %s \n",s1.rn,s1.name,s1.age,s1.add);

}

if(no==s2.rn)

{

printf("Roll no: %d \t Name: %s Age: %d Address: %s \n",s2.rn,s2.name,s2.age,s2.add);

}

if(no==s3.rn)

{

printf("Roll no: %d \t Name: %s Age: %d Address: %s \n",s3.rn,s3.name,s3.age,s3.add);

}

if(no==s4.rn)

{

printf("Roll no: %d \t Name: %s Age: %d Address: %s \n",s4.rn,s4.name,s4.age,s4.add);

}

if(no==s5.rn)

{

printf("Roll no: %d \t Name: %s Age: %d Address: %s \n",s5.rn,s5.name,s5.age,s5.add);

}

if(no==s6.rn)

{

printf("Roll no: %d \t Name: %s Age: %d Address: %s \n",s6.rn,s6.name,s6.age,s6.add);

}

if(no==s7.rn)

{

printf("Roll no: %d \t Name: %s Age: %d Address: %s \n",s7.rn,s7.name,s7.age,s7.add);

}

if(no==s8.rn)

{

printf("Roll no: %d \t Name: %s Age: %d Address: %s \n",s8.rn,s8.name,s8.age,s8.add);

}

if(no==s9.rn)

{

printf("Roll no: %d \t Name: %s Age: %d Address: %s \n",s9.rn,s9.name,s9.age,s9.add);

}

if(no==s10.rn)

{

printf("Roll no: %d \t Name: %s Age: %d Address: %s \n",s10.rn,s10.name,s10.age,s10.add);

}

printf("\nNAMES OF STUDENT HAVING AGE 14: \n");

if(14==s1.age)

{

printf("Name: %s \n",s1.name);

}

if(14==s2.age)

{

printf("Name: %s \n",s2.name);

}

if(14==s3.age)

{

printf("Name: %s \n",s3.name);

}

if(14==s4.age)

{

printf("Name: %s \n",s4.name);

}

if(14==s5.age)

{

printf("Name: %s \n",s5.name);

}

if(14==s6.age)

{

printf("Name: %s \n",s6.name);

}

if(14==s7.age)

{

printf("Name: %s \n",s7.name);

}

if(14==s8.age)

{

printf("Name: %s \n",s8.name);

}

if(14==s9.age)

{

printf("Name: %s \n",s9.name);

}

if(14==s10.age)

{

printf("Name: %s \n",s10.name);

}

printf("\nNAME OF STUDENT HAVING EVENR ROLL NO: \n");

if(s1.rn%2==0)

{

printf("Name: %s \n",s1.name);

}

if(s2.rn%2==0)

{

printf("Name: %s \n",s2.name);

}

if(s3.rn%2==0)

{

printf("Name: %s \n",s3.name);

}

if(s4.rn%2==0)

{

printf("Name: %s \n",s4.name);

}

if(s5.rn%2==0)

{

printf("Name: %s \n",s5.name);

}

if(s6.rn%2==0)

{

printf("Name: %s \n",s6.name);

}

if(s7.rn%2==0)

{

printf("Name: %s \n",s7.name);

}

if(s8.rn%2==0)

{

printf("Name: %s \n",s8.name);

}

if(s9.rn%2==0)

{

printf("Name: %s \n",s9.name);

}

if(s10.rn%2==0)

{

printf("Name: %s \n",s10.name);

}

return 0;

}

**output:-**

enter details of 1st sudent:

Enter the roll no of student: 10

Enter Name of the student: a

Enter age between 11-14: 14

Enter Address: ang

enter details of 2nd sudent:

Enter the roll no of student: 11

Enter Name of the student: b

Enter age between 11-14: 12

Enter Address: puri

enter details of 3rd sudent:

Enter the roll no of student: 16

Enter Name of the student: c

Enter age between 11-14: 14

Enter Address: ctc

enter details of 4th sudent:

Enter the roll no of student: 32

Enter Name of the student: d

Enter age between 11-14: 15

Enter Address: dkl

enter details of 5th sudent:

Enter the roll no of student: 18

Enter Name of the student: e

Enter age between 11-14: 13

Enter Address: bbsr

enter details of 6th sudent:

Enter the roll no of student: 22

Enter Name of the student: f

Enter age between 11-14: 14

Enter Address: ctc

enter details of 7th sudent:

Enter the roll no of student: 23

Enter Name of the student: j

Enter age between 11-14: 14

Enter Address: ang

enter details of 8th sudent:

Enter the roll no of student: 26

Enter Name of the student: l

Enter age between 11-14: 18

Enter Address: bbsr

enter details of 9th sudent:

Enter the roll no of student: 24

Enter Name of the student: g

Enter age between 11-14: 14

Enter Address: ara

enter details of 10thudent:

Enter the roll no of student: 8

Enter Name of the student: u

Enter age between 11-14: 16

Enter Address: ctc

your entered student details are:

Roll no: 10 Name: a Age: 14 Address: ang

Roll no: 11 Name: b Age: 12 Address: puri

Roll no: 16 Name: c Age: 14 Address: ctc

Roll no: 32 Name: d Age: 15 Address: dkl

Roll no: 18 Name: e Age: 13 Address: bbsr

Roll no: 22 Name: f Age: 14 Address: ctc

Roll no: 23 Name: j Age: 14 Address: ang

Roll no: 26 Name: l Age: 18 Address: bbsr

Roll no: 24 Name: g Age: 14 Address: ara

Roll no: 8 Name: u Age: 16 Address: ctc

ENTER ROLL NO OF STUDENT TO GET DETAILS: 23

Roll no: 23 Name: j Age: 14 Address: ang

NAMES OF STUDENT HAVING AGE 14:

Name: a

Name: c

Name: f

Name: j

Name: g

NAME OF STUDENT HAVING EVENR ROLL NO:

Name: a

Name: c

Name: d

Name: e

Name: f

Name: l

Name: g

Name: u

1. **using typedef**

**program:-**

#include <stdio.h>

#include<string.h>

struct student

{

char name[25];

int rn;

int age;

char add[10];

};

int main()

{

int no;

typedef struct student s;

s s1,s2,s3,s4,s5,s6,s7,s8,s9,s10;

printf("enter details of 1st sudent: ");

printf("\nEnter the roll no of student: ");

scanf("%d",&s1.rn);

printf("Enter Name of the student: ");

scanf("%s",s1.name);

printf("Enter age between 11-14: ");

scanf("%d",&s1.age);

printf("Enter Address: ");

scanf("%s",s1.add);

printf("enter details of 2nd sudent: ");

printf("\nEnter the roll no of student: ");

scanf("%d",&s2.rn);

printf("Enter Name of the student: ");

scanf("%s",s2.name);

printf("Enter age between 11-14: ");

scanf("%d",&s2.age);

printf("Enter Address: ");

scanf("%s",s2.add);

printf("enter details of 3rd sudent: ");

printf("\nEnter the roll no of student: ");

scanf("%d",&s3.rn);

printf("Enter Name of the student: ");

scanf("%s",s3.name);

printf("Enter age between 11-14: ");

scanf("%d",&s3.age);

printf("Enter Address: ");

scanf("%s",s3.add);

printf("enter details of 4th sudent: ");

printf("\nEnter the roll no of student: ");

scanf("%d",&s4.rn);

printf("Enter Name of the student: ");

scanf("%s",s4.name);

printf("Enter age between 11-14: ");

scanf("%d",&s4.age);

printf("Enter Address: ");

scanf("%s",s4.add);

printf("enter details of 5th sudent: ");

printf("\nEnter the roll no of student: ");

scanf("%d",&s5.rn);

printf("Enter Name of the student: ");

scanf("%s",s5.name);

printf("Enter age between 11-14: ");

scanf("%d",&s5.age);

printf("Enter Address: ");

scanf("%s",s5.add);

printf("enter details of 6th sudent: ");

printf("\nEnter the roll no of student: ");

scanf("%d",&s6.rn);

printf("Enter Name of the student: ");

scanf("%s",s6.name);

printf("Enter age between 11-14: ");

scanf("%d",&s6.age);

printf("Enter Address: ");

scanf("%s",s6.add);

printf("enter details of 7th sudent: ");

printf("\nEnter the roll no of student: ");

scanf("%d",&s7.rn);

printf("Enter Name of the student: ");

scanf("%s",s7.name);

printf("Enter age between 11-14: ");

scanf("%d",&s7.age);

printf("Enter Address: ");

scanf("%s",s7.add);

printf("enter details of 8th sudent: ");

printf("\nEnter the roll no of student: ");

scanf("%d",&s8.rn);

printf("Enter Name of the student: ");

scanf("%s",s8.name);

printf("Enter age between 11-14: ");

scanf("%d",&s8.age);

printf("Enter Address: ");

scanf("%s",s8.add);

printf("enter details of 9th sudent: ");

printf("\nEnter the roll no of student: ");

scanf("%d",&s9.rn);

printf("Enter Name of the student: ");

scanf("%s",s9.name);

printf("Enter age between 11-14: ");

scanf("%d",&s9.age);

printf("Enter Address: ");

scanf("%s",s9.add);

printf("enter details of 10thudent: ");

printf("\nEnter the roll no of student: ");

scanf("%d",&s10.rn);

printf("Enter Name of the student: ");

scanf("%s",s10.name);

printf("Enter age between 11-14: ");

scanf("%d",&s10.age);

printf("Enter Address: ");

scanf("%s",s10.add);

printf("\nyour entered student details are: \n");

printf("Roll no: %d \t Name: %s Age: %d Address: %s \n",s1.rn,s1.name,s1.age,s1.add);

printf("Roll no: %d \t Name: %s Age: %d Address: %s \n",s2.rn,s2.name,s2.age,s2.add);

printf("Roll no: %d \t Name: %s Age: %d Address: %s \n",s3.rn,s3.name,s3.age,s3.add);

printf("Roll no: %d \t Name: %s Age: %d Address: %s \n",s4.rn,s4.name,s4.age,s4.add);

printf("Roll no: %d \t Name: %s Age: %d Address: %s \n",s5.rn,s5.name,s5.age,s5.add);

printf("Roll no: %d \t Name: %s Age: %d Address: %s \n",s6.rn,s6.name,s6.age,s6.add);

printf("Roll no: %d \t Name: %s Age: %d Address: %s \n",s7.rn,s7.name,s7.age,s7.add);

printf("Roll no: %d \t Name: %s Age: %d Address: %s \n",s8.rn,s8.name,s8.age,s8.add);

printf("Roll no: %d \t Name: %s Age: %d Address: %s \n",s9.rn,s9.name,s9.age,s9.add);

printf("Roll no: %d \t Name: %s Age: %d Address: %s \n",s10.rn,s10.name,s10.age,s10.add);

printf("ENTER ROLL NO OF STUDENT TO GET DETAILS: ");

scanf("%d",&no);

if(no==s1.rn)

{

printf("Roll no: %d \t Name: %s Age: %d Address: %s \n",s1.rn,s1.name,s1.age,s1.add);

}

if(no==s2.rn)

{

printf("Roll no: %d \t Name: %s Age: %d Address: %s \n",s2.rn,s2.name,s2.age,s2.add);

}

if(no==s3.rn)

{

printf("Roll no: %d \t Name: %s Age: %d Address: %s \n",s3.rn,s3.name,s3.age,s3.add);

}

if(no==s4.rn)

{

printf("Roll no: %d \t Name: %s Age: %d Address: %s \n",s4.rn,s4.name,s4.age,s4.add);

}

if(no==s5.rn)

{

printf("Roll no: %d \t Name: %s Age: %d Address: %s \n",s5.rn,s5.name,s5.age,s5.add);

}

if(no==s6.rn)

{

printf("Roll no: %d \t Name: %s Age: %d Address: %s \n",s6.rn,s6.name,s6.age,s6.add);

}

if(no==s7.rn)

{

printf("Roll no: %d \t Name: %s Age: %d Address: %s \n",s7.rn,s7.name,s7.age,s7.add);

}

if(no==s8.rn)

{

printf("Roll no: %d \t Name: %s Age: %d Address: %s \n",s8.rn,s8.name,s8.age,s8.add);

}

if(no==s9.rn)

{

printf("Roll no: %d \t Name: %s Age: %d Address: %s \n",s9.rn,s9.name,s9.age,s9.add);

}

if(no==s10.rn)

{

printf("Roll no: %d \t Name: %s Age: %d Address: %s \n",s10.rn,s10.name,s10.age,s10.add);

}

printf("\nNAMES OF STUDENT HAVING AGE 14: \n");

if(14==s1.age)

{

printf("Name: %s \n",s1.name);

}

if(14==s2.age)

{

printf("Name: %s \n",s2.name);

}

if(14==s3.age)

{

printf("Name: %s \n",s3.name);

}

if(14==s4.age)

{

printf("Name: %s \n",s4.name);

}

if(14==s5.age)

{

printf("Name: %s \n",s5.name);

}

if(14==s6.age)

{

printf("Name: %s \n",s6.name);

}

if(14==s7.age)

{

printf("Name: %s \n",s7.name);

}

if(14==s8.age)

{

printf("Name: %s \n",s8.name);

}

if(14==s9.age)

{

printf("Name: %s \n",s9.name);

}

if(14==s10.age)

{

printf("Name: %s \n",s10.name);

}

printf("\nNAME OF STUDENT HAVING EVENR ROLL NO: \n");

if(s1.rn%2==0)

{

printf("Name: %s \n",s1.name);

}

if(s2.rn%2==0)

{

printf("Name: %s \n",s2.name);

}

if(s3.rn%2==0)

{

printf("Name: %s \n",s3.name);

}

if(s4.rn%2==0)

{

printf("Name: %s \n",s4.name);

}

if(s5.rn%2==0)

{

printf("Name: %s \n",s5.name);

}

if(s6.rn%2==0)

{

printf("Name: %s \n",s6.name);

}

if(s7.rn%2==0)

{

printf("Name: %s \n",s7.name);

}

if(s8.rn%2==0)

{

printf("Name: %s \n",s8.name);

}

if(s9.rn%2==0)

{

printf("Name: %s \n",s9.name);

}

if(s10.rn%2==0)

{

printf("Name: %s \n",s10.name);

}

return 0;

}

**output:-**

enter details of 1st sudent:

Enter the roll no of student: 10

Enter Name of the student: a

Enter age between 11-14: 14

Enter Address: ang

enter details of 2nd sudent:

Enter the roll no of student: 11

Enter Name of the student: b

Enter age between 11-14: 12

Enter Address: puri

enter details of 3rd sudent:

Enter the roll no of student: 16

Enter Name of the student: c

Enter age between 11-14: 14

Enter Address: ctc

enter details of 4th sudent:

Enter the roll no of student: 32

Enter Name of the student: d

Enter age between 11-14: 15

Enter Address: dkl

enter details of 5th sudent:

Enter the roll no of student: 18

Enter Name of the student: e

Enter age between 11-14: 13

Enter Address: bbsr

enter details of 6th sudent:

Enter the roll no of student: 22

Enter Name of the student: f

Enter age between 11-14: 14

Enter Address: ctc

enter details of 7th sudent:

Enter the roll no of student: 23

Enter Name of the student: j

Enter age between 11-14: 14

Enter Address: ang

enter details of 8th sudent:

Enter the roll no of student: 26

Enter Name of the student: l

Enter age between 11-14: 18

Enter Address: bbsr

enter details of 9th sudent:

Enter the roll no of student: 24

Enter Name of the student: g

Enter age between 11-14: 14

Enter Address: ara

enter details of 10thudent:

Enter the roll no of student: 8

Enter Name of the student: u

Enter age between 11-14: 16

Enter Address: ctc

your entered student details are:

Roll no: 10 Name: a Age: 14 Address: ang

Roll no: 11 Name: b Age: 12 Address: puri

Roll no: 16 Name: c Age: 14 Address: ctc

Roll no: 32 Name: d Age: 15 Address: dkl

Roll no: 18 Name: e Age: 13 Address: bbsr

Roll no: 22 Name: f Age: 14 Address: ctc

Roll no: 23 Name: j Age: 14 Address: ang

Roll no: 26 Name: l Age: 18 Address: bbsr

Roll no: 24 Name: g Age: 14 Address: ara

Roll no: 8 Name: u Age: 16 Address: ctc

ENTER ROLL NO OF STUDENT TO GET DETAILS: 23

Roll no: 23 Name: j Age: 14 Address: ang

NAMES OF STUDENT HAVING AGE 14:

Name: a

Name: c

Name: f

Name: j

Name: g

NAME OF STUDENT HAVING EVENR ROLL NO:

Name: a

Name: c

Name: d

Name: e

Name: f

Name: l

Name: g

Name: u

1. **using array of structures**

**program:-**

#include <stdio.h>

#include<string.h>

struct student

{

char name[25];

int rn;

int age;

char add[10];

}s[10];

int main()

{

int i ,no;

printf("ENTER DETAILS OF 10 STUDENTS.....\n");

for (i=1;i<=10;i++)

{

printf("\nEnter the roll no of %d student: ",i);

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

printf("Name of the student: ");

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

printf("Enter age of student between 11-14: ");

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

printf("Enter address of student: ");

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

}

printf("\nyour entered details are: \n");

for(i=1;i<=10;i++)

{

printf("Roll: %d \t Name: %s \t Age: %d \t Address: %s \n",s[i].rn,s[i].name,s[i].age,s[i].add);

}

printf("\nEnter a roll no of student to get details: ");

scanf("%d",&no);

printf("\nDetail of the studen whose Roll No is: %d \n",no);

for(i=1;i<=10;i++)

{

if (s[i].rn==no)

{

printf("Roll: %d \t Name: %s \t Age: %d \t Address: %s \n",s[i].rn,s[i].name,s[i].age,s[i].add);

}

}

printf("\n The Names Of Student Having Age \"14\": \n");

for(i=1;i<=10;i++)

{

if (s[i].age==14)

{

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

}

}

printf("\nThe Names of Student Having Even Roll No: \n");

for(i=1;i<=10;i++)

{

if (s[i].rn%2==0)

{

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

}

}

return 0;

}

**output:-**

ENTER DETAILS OF 10 STUDENTS.....

Enter the roll no of 1 student: 10

Name of the student: aa

Enter age of student between 11-14: 14

Enter address of student: ang

Enter the roll no of 2 student: 12

Name of the student: bb

Enter age of student between 11-14: 12

Enter address of student: puri

Enter the roll no of 3 student: 11

Name of the student: ccc

Enter age of student between 11-14: 16

Enter address of student: ctc

Enter the roll no of 4 student: 14

Name of the student: ddd

Enter age of student between 11-14: 14

Enter address of student: ang

Enter the roll no of 5 student: 23

Name of the student: eee

Enter age of student between 11-14: 14

Enter address of student: puri

Enter the roll no of 6 student: 22

Name of the student: sss

Enter age of student between 11-14: 15

Enter address of student: bbsr

Enter the roll no of 7 student: 14

Name of the student: nnn

Enter age of student between 11-14: 14

Enter address of student: qer

Enter the roll no of 8 student: 96

Name of the student: mkl

Enter age of student between 11-14: 17

Enter address of student: london

Enter the roll no of 9 student: 78

Name of the student: kjl

Enter age of student between 11-14: 19

Enter address of student: paris

Enter the roll no of 10 student: 36

Name of the student: erty

Enter age of student between 11-14: 17

Enter address of student: vizag

your entered details are:

Roll: 10 Name: aa Age: 14 Address: ang

Roll: 12 Name: bb Age: 12 Address: puri

Roll: 11 Name: ccc Age: 16 Address: ctc

Roll: 14 Name: ddd Age: 14 Address: ang

Roll: 23 Name: eee Age: 14 Address: puri

Roll: 22 Name: sss Age: 15 Address: bbsr

Roll: 14 Name: nnn Age: 14 Address: qer

Roll: 96 Name: mkl Age: 17 Address: london

Roll: 78 Name: kjl Age: 19 Address: paris

Roll: 36 Name: erty Age: 17 Address: vizag

Enter a roll no of student to get details: 78

Detail of the studen whose Roll No is: 78

Roll: 78 Name: kjl Age: 19 Address: paris

The Names Of Student Having Age "14":

Name: aa

Name: ddd

Name: eee

Name: nnn

The Names of Student Having Even Roll No:

name: aa

name: bb

name: ddd

name: sss

name: nnn

name: mkl

name: kjl

name: erty

1. **using nested structure**

**program:-**

#include <stdio.h>

#include<string.h>

struct student

{

char name[25];

int rn;

int age;

struct add

{

char cn[10]; // cn: city name

char mob[12];

int pin;

}a;

}s[10];

int main() {

int i ,no;

printf("ENTER DETAILS OF 10 STUDENTS.....\n");

for (i=1;i<=10;i++)

{

printf("\nEnter the roll no of %d student: ",i);

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

printf("Name of the student: ");

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

printf("Enter age of student between 11-14: ");

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

printf("Enter city name: ");

scanf("%s",s[i].a.cn);

printf("Enter mobile no: ");

scanf("%s",s[i].a.mob);

printf("Enter pincode: ");

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

}

printf("\nyour entered details are: \n");

for(i=1;i<=10;i++)

{

printf("roll: %d \t name: %s \t age: %d \t city: %s \tmob: %s \tpin: %d \n",s[i].rn,s[i].name,s[i].age,s[i].a.cn,s[i].a.mob,s[i].a.pin);

}

printf("\nEnter a roll no of your entered student to get details of that student: ");

scanf("%d",&no);

printf("\nDetail of the student whose Roll No: %d ",no);

for(i=1;i<=10;i++)

{

if (s[i].rn==no)

{

printf("\nroll: %d \t name: %s \t age: %d \t city: %s \tmob: %s \tpin: %d \n",s[i].rn,s[i].name,s[i].age,s[i].a.cn,s[i].a.mob,s[i].a.pin);

}

}

printf("\n The Names Of Student Having Age \"14\": \n");

for(i=1;i<=10;i++)

{

if (s[i].age==14)

{

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

}

}

printf("\The Names Of Student Having Even Roll No: \n");

for(i=1;i<=10;i++)

{

if (s[i].rn%2==0)

{

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

}

}

return 0;

}

**output:-**

ENTER DETAILS OF 10 STUDENTS.....

Enter the roll no of 1 student: 1

Name of the student: A

Enter age of student between 11-14: 11

Enter city name: bbsr

Enter mobile no: 1234567

Enter pincode: 759105

Enter the roll no of 2 student: 2

Name of the student: B

Enter age of student between 11-14: 14

Enter city name: ctc

Enter mobile no: 12345678

Enter pincode: 759105

Enter the roll no of 3 student: 3

Name of the student: C

Enter age of student between 11-14: 15

Enter city name: ang

Enter mobile no: 1234567

Enter pincode: 751001

Enter the roll no of 4 student: 4

Name of the student: D

Enter age of student between 11-14: 14

Enter city name: dkl

Enter mobile no: 555555555

Enter pincode: 111454

Enter the roll no of 5 student: 5

Name of the student: E

Enter age of student between 11-14: 18

Enter city name: puri

Enter mobile no: 777777777

Enter pincode: 456

Enter the roll no of 6 student: 6

Name of the student: f

Enter age of student between 11-14:

Enter city name: kdp

Enter mobile no: 66666666

Enter pincode: 123654

Enter the roll no of student: 7

Name of the student: G

Enter age of student between 11-14: 17

Enter city name: deo

Enter mobile no: 9999999

Enter pincode: 778

Enter the roll no of 8 student: 8

Name of the student: h

Enter age of student between 11-14: 14

Enter city name: ganjam

Enter mobile no: 88888888

Enter pincode: 424

Enter the roll no of 9 student: 9

Name of the student: I

Enter age of student between 11-14: 13

Enter city name: tchl

Enter mobile no: 98967

Enter pincode: 365

Enter the roll no of 10 student: 10

Name of the student: j

Enter age of student between 11-14: 14

Enter city name: kalahandi

Enter mobile no: 636363663

Enter pincode: 2589

your entered details are:

roll: 1 name: A age: 11 city: bbsr mob: 1234567 pin: 759105

roll: 2 name: B age: 14 city: ctc mob: 12345678 pin: 759105

roll: 3 name: C age: 15 city: ang mob: 1234567 pin: 751001

roll: 4 name: D age: 14 city: dkl mob: 555555555 pin: 111454

roll: 5 name: E age: 18 city: puri mob: 777777777 pin: 456

roll: 6 name: f age: 14 city: kdp mob: 66666666 pin: 123654

roll: 7 name: G age: 17 city: deo mob: 9999999 pin: 778

roll: 8 name: h age: 14 city: ganjam mob: 88888888 pin: 424

roll: 9 name: I age: 13 city: tchl mob: 98967 pin: 365

roll: 10 name: j age: 14 city: kalahandi mob: 636363663 pin: 2589

Enter a roll no of your entered student to get details of that student: 4

Detail of the student whose Roll No: 4

roll: 4 name: D age: 14 city: dkl mob: 555555555 pin: 111454

The Names Of Student Having Age "14":

name: B

name: D

name: f

name: h

The Names Of Student Having Even Roll No:

name: B

name: D

name: f

name: h

name: j

1. **passing structure to function**

**program:-**

#include <stdio.h>

#include<string.h>

struct student

{

char name[25];

int rn;

int age;

char add[10];

}s[10];

void show( struct student s[]);

int main()

{

int i ,no;

printf("ENTER DETAILS OF 10 STUDENTS.....\n");

for (i=1;i<=10;i++)

{

printf("\nEnter the roll no of %d student: ",i);

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

printf("Name of the student: ");

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

printf("Enter age of student between 11-14: ");

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

printf("Enter address of student: ");

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

}

printf("\nyour entered details are: \n");

for(i=1;i<=10;i++)

{

printf("Roll: %d \t Name: %s \t Age: %d \t Address: %s \n",s[i].rn,s[i].name,s[i].age,s[i].add);

}

show(s);

return 0;

}

void show( struct student s[])

{

int no,i;

printf("\nEnter a roll no of student to get details: ");

scanf("%d",&no);

printf("\nDetail of the studen whose Roll No is: %d \n",no);

for(i=1;i<=10;i++)

{

if (s[i].rn==no)

{

printf("Roll: %d \t Name: %s \t Age: %d \t Address: %s \n",s[i].rn,s[i].name,s[i].age,s[i].add);

}

}

printf("\n The Names Of Student Having Age \"14\": \n");

for(i=1;i<=10;i++)

{

if (s[i].age==14)

{

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

}

}

printf("\nThe Names of Student Having Even Roll No: \n");

for(i=1;i<=10;i++)

{

if (s[i].rn%2==0)

{

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

}

}

}

**output:-**

ENTER DETAILS OF 10 STUDENTS.....

Enter the roll no of 1 student: 1

Name of the student: aaa

Enter age of student between 11-14: 14

Enter address of student: aaa

Enter the roll no of 2 student: 2

Name of the student: bbb

Enter age of student between 11-14: 15

Enter address of student: puri

Enter the roll no of 3 student: 3

Name of the student: asa

Enter age of student between 11-14: 16

Enter address of student: london

Enter the roll no of 4 student: 4

Name of the student: qwerty

Enter age of student between 11-14: 17

Enter address of student: ctc

Enter the roll no of 5 student: 5

Name of the student: hnj

Enter age of student between 11-14: 14

Enter address of student: paris

Enter the roll no of 6 student: 6

Name of the student: sdfg

Enter age of student between 11-14: 14

Enter address of student: canada

Enter the roll no of 7 student: 7

Name of the student: uop

Enter age of student between 11-14: 16

Enter address of student: usa

Enter the roll no of 8 student: 8

Name of the student: kla

Enter age of student between 11-14: 14

Enter address of student: spain

Enter the roll no of 9 student: 9

Name of the student: wer

Enter age of student between 11-14: 14

Enter address of student: swizerland

Enter the roll no of 10 student: 10

Name of the student: nan

Enter age of student between 11-14: 14

Enter address of student: hongkong

your entered details are:

Roll: 1 Name: aaa Age: 14 Address: aaa

Roll: 2 Name: bbb Age: 15 Address: puri

Roll: 3 Name: asa Age: 16 Address: london

Roll: 4 Name: qwerty Age: 17 Address: ctc

Roll: 5 Name: hnj Age: 14 Address: paris

Roll: 6 Name: sdfg Age: 14 Address: canada

Roll: 7 Name: uop Age: 16 Address: usa

Roll: 8 Name: kla Age: 14 Address: spain

Roll: 9 Name: wer Age: 14 Address: swizerland

Roll: 10 Name: nan Age: 14 Address: hongkong

Enter a roll no of student to get details: 9

Detail of the studen whose Roll No is: 9

Roll: 9 Name: wer Age: 14 Address: swizerland

The Names Of Student Having Age "14":

Name: aaa

Name: hnj

Name: sdfg

Name: kla

Name: wer

Name: nan

The Names of Student Having Even Roll No:

name: bbb

name: qwerty

name: sdfg

name: kla

name: nan

1. **using union variable**

**program:-**

**output:-**