# C Program to find union intersection and

# Difference of two sets

#include<stdio.h>

void main()

{

int i,ch,n1,n2,set1[10],set2[10],set4[20], set3[20];

char wish;

do

{

printf("press 1 for union");

printf("\npress 2 for intersection");

printf("\npress 3 for subtraction");

printf("\n enter ur choice");

scanf("%d",&ch);

switch(ch)

{

case 1:

printf("\nenter the size of set1\n");

scanf("%d",&n1);

printf("enter the element of set1\n");

for(i=0;i<n1;i++)

scanf("%d",&set1[i]);

printf("enter the size of set2\n");

scanf("%d",&n2);

printf("enter the elements of set2\n");

for(i=0;i<n2;i++)

scanf("%d",&set2[i]);

if(n1==n2)

{

for(i=0;i<n2;i++)

{

set3[i]=set1[i]||set2[i];

}

for(i=0;i<n2;i++)

{

printf("%d",set3[i]);

}

}

else

{

printf("size are not equal");

}

break;

case 2:

printf("\nenter the size of set1\n");

scanf("%d",&n1);

printf("enter the element of set1\n");

for(i=0;i<n1;i++)

scanf("%d",&set1[i]);

printf("enter the size of set2\n");

scanf("%d",&n2);

printf("enter the elements of set2\n");

for(i=0;i<n2;i++)

scanf("%d",&set2[i]);

if(n1==n2)

{

for(i=0;i<n2;i++)

{

set3[i]=set1[i]&&set2[i];

}

for(i=0;i<n2;i++)

{

printf("%d",set3[i]);

}

}

else

{

printf("size are not equal");

}

break;

case 3:

printf("\nenter the size of set1\n");

scanf("%d",&n1);

printf("enter the element of set1\n");

for(i=0;i<n1;i++)

scanf("%d",&set1[i]);

printf("enter the size of set2\n");

scanf("%d",&n2);

printf("enter the elements of set2\n");

for(i=0;i<n2;i++)

scanf("%d",&set2[i]);

if(n1==n2)

{

for(i=0;i<n2;i++)

{

set3[i]=set1[i]&&!set2[i];

}

for(i=0;i<n2;i++)

{

printf("%d",set3[i]);

}

}

else

{

printf("size are not equal");

}

break;

default:

printf("invalid case input");

}

printf("\n want to continue: ");

scanf("%c",&wish);

}

while(wish!='n');

}

# Output

 enter ur choice3

enter the size of set1

4

enter the element of set1

12

16

20

24

enter the size of set2

4

enter the elements of set2

23

24

12

13

0000

 want to continue: press 1 for union

press 2 for intersection

press 3 for subtraction

 enter ur choice^C