Wap to find union intersection and difference

#include<stdio.h>

int main()

{

int i,j,k,p,ch,n1,n2,set1[10],set2[10],set3[20],flag;

printf("enter the size of set1:\t");

scanf(" %d",&n1);

printf("enter the elements of set1:\n");

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

{

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

}

printf("enter the size of set2:\t");

scanf(" %d",&n2);

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

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

{

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

}

while(1)

{

printf("\npress 1 for union");

printf("\npress 2 for intersection");

printf("\npress 3 for difference");

printf("\nenter your choice(1-3):\t");

scanf("%d",&ch);

switch(ch)

{

case 1:

printf("\n the union is:\n");

k=0;

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

{

set3[k]=set1[i];

k++;

}

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

{

flag=1;

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

{

if(set2[i]==set1[j])

{

flag=0;

break;

}

}

if(flag==1)

{

set3[k]=set2[i];

k++;

}

}

p=k;

for(k=0;k<p;k++)

{

printf(" %d\t",set3[k]);

}

break;

case 2:

printf("\n the intersection is:\n");

k=0;

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

{

flag=1;

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

{

if(set2[i]==set1[j])

{

flag=0;

break;

}

}

if(flag==0)

{

set3[k]=set2[i];

k++;

}

}

p=k;

for(k=0;k<p;k++)

{

printf(" %d\t",set3[k]);

break;

case 3:

printf("\n the difference is:\n");

k=0;

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

{

flag=1;

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

{

if(set1[i]==set2[j])

{

flag=0;

break;

}

}

if(flag==1)

{

set3[k]=set1[i];

k++;

}

}

p=k;

for(k=0;k<p;k++)

{

printf(" %d\t",set3[k]);

}

break;

default:

printf("invalid choice!!");

}

}

}

return 0;

}