PROGRAM

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#include<stdio.h>
#include<stdlib.h>
void main()
  int ch,A[30],B[20],C[20],m,n,i;
  do
  {
    printf("\n choice to perform: ");
    printf("\n1.Union\t2.Intersection\t3.Difference\t4.Exit");
    printf("\nChoice:");
    scanf("%d",&ch);
    switch(ch)
      case 1:printf("\nEnter first set:");
      scanf("%d",&m);
       printf("\nEnter second set: ");
      scanf("%d",&n);
      if(m!=n)
      {
         printf("\nInvalid!");
         break;
      }
       printf("\nEnter first set:(0/1)");
      for(i=0;i<m;i++)
        scanf("%d",&A[i]);
      }
      printf("\nEnter set:(0/1)");
```

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for(i=0;i<n;i++)
{
  scanf("%d",&B[i]);
}
printf("\nElements of set1 union set2: ");
for(i=0;i<m;i++)
{
  C[i]=A[i]|B[i];
  printf("%d ",C[i]);
}
break;
case 2:printf("\nEnter first set: ");
scanf("%d",&m);
printf("\nEnter second set: ");
scanf("%d",&n);
if(m!=n)
  printf("\nInvalid!");
  break;
}
printf("\nEnter first set:(0/1) ");
for(i=0;i<m;i++)
{
  scanf("%d",&A[i]);
}
printf("\nEnter set:(0/1)");
for(i=0;i<n;i++)
{
  scanf("%d",&B[i]);
```

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}
printf("\nElements of set1 intersection set2:");
for(i=0;i<m;i++)
{
  C[i]=A[i]\&B[i];
  printf("%d ",C[i]);
}
break;
case 3:printf("\nEnter first set: ");
scanf("%d",&m);
printf("\nEnter second set: ");
scanf("%d",&n);
if(m!=n)
{
  printf("\nInvalid!");
  break;
}
printf("\nEnter first set:(0/1) ");
for(i=0;i<m;i++)
{
  scanf("%d",&A[i]);
}
printf("\nEnter second set:(0/1) ");
for(i=0;i<n;i++)
{
  scanf("%d",&B[i]);
}
for(i=0;i<n;i++)
{
```

```
if(A[i]==0)
         C[i]=0;
         else
         {
           if(B[i]==1)
           C[i]=0;
           else
           C[i]=1;
         }
      }
       printf("\nElements of set1 - set2: ");
      for(i=0;i<m;i++)
      {
         printf("%d ",C[i]);
      }
       break;
       case 4:printf("\nProgram exit successfully!");
       exit(0);
       break;
      default:printf("\nInvalid choice!");
    };
  }while(1);
}
```

