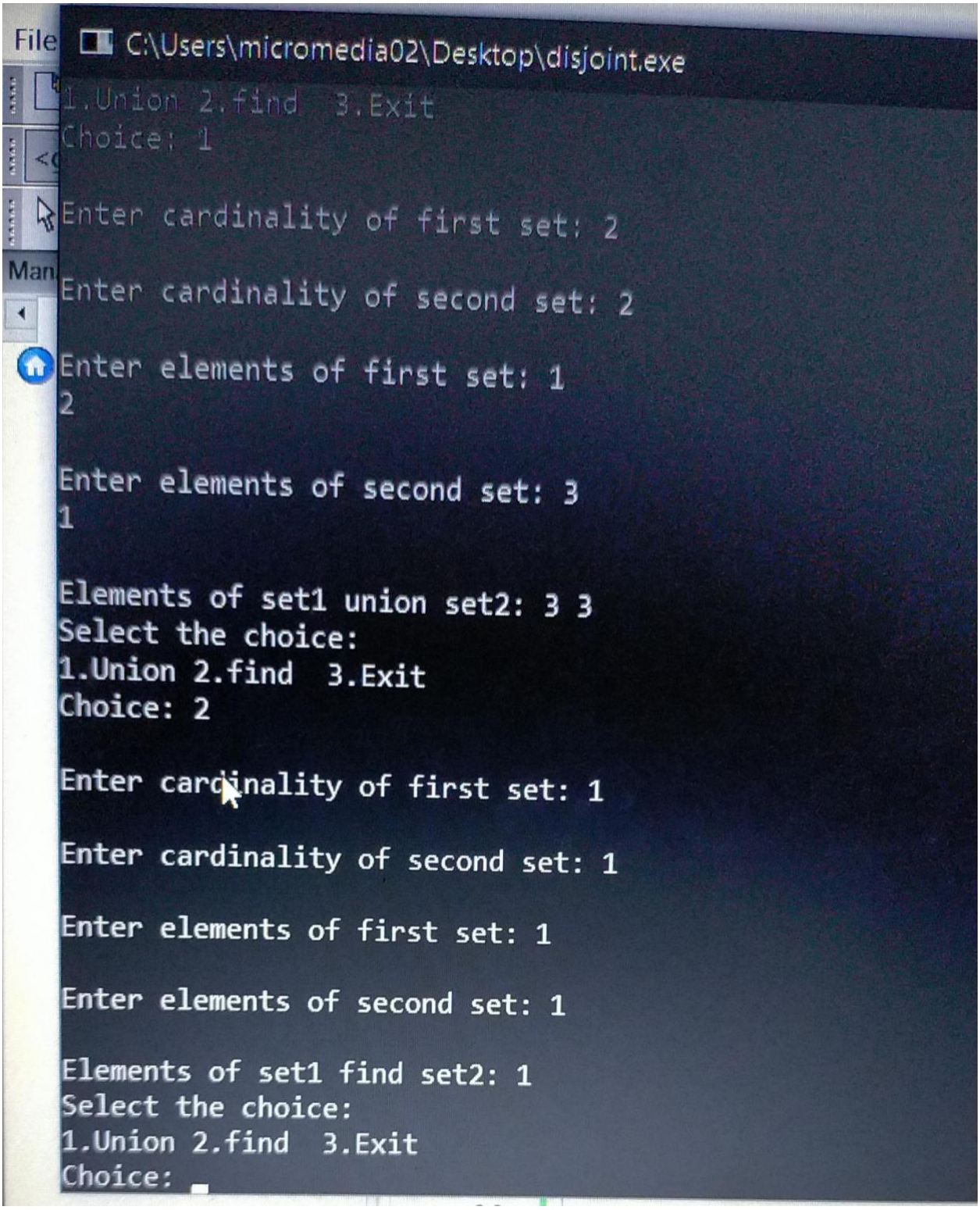
Program for disjoint set for union and find

```
#include<stdio.h>
#include<stdlib.h>
Void main()
{
 Int ch,A[50],B[50],C[50],m,n,I;
 Do
 {
   Printf(“\nSelect the choice: “);
   Printf(“\n1.Union\t2.find\t3.Exit”);
   Printf(“\nChoice: “);
   Scanf(“%d”,&ch);
  Switch(ch)
  {
   Case 1:printf(“\nEnter cardinality of first set: “);
         Scanf(“%d”,&m);
        Printf(“\nEnter cardinality of second set: “);
 Scanf(“%d”,&n);
 If(m!=n)
 {
 Printf(“\nCannot perform union!”);
 Break;
     }
    Printf(“\nEnter elements of first set: “);
    For(i=0;i<m;i++)
 {
  Scanf(“%d”,&A[i]);
  }
 Printf(“\nEnter elements of second set: “);
```

```
   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 cardinality of first set: “);
        Scanf(“%d”,&m);
       Printf(“\nEnter cardinality of second set: “);
Scanf(“%d”,&n);
If(m!=n)
{
Printf(“\nCannot perform find!”);
Break;
    }
   Printf(“\nEnter elements of first set: “);
   For(i=0;i<m;i++)
{
 Scanf(“%d”,&A[i]);
 }
Printf(“\nEnter elements of second set: “);
   For(i=0;i<n;i++)
{
 Scanf(“%d”,&B[i]);
```

```
 }
Printf("\nElements of set1 find set2: ");
For(i=0;i<m;i++)
{
 C[i]=A[i]&B[i];
 Printf("%d ",C[i]);
 }
       Break;

  Case 4:printf("\nProgram exit successfully!");
        Exit(0);
       Break;
  Default:printf("\nInvalid choice!");
  };
 }while(1);
}
```


File
C:\Users\micromedia02\Desktop\disjoint.exe
1.Union 2.find 3.Exit
Choice: 1
Enter cardinality of first set: 2
Enter cardinality of second set: 2
Enter elements of first set: 1
2
Enter elements of second set: 3
1
Elements of set1 union set2: 3 3
Select the choice:
1.Union 2.find 3.Exit
Choice: 2
Enter cardinality of first set: 1
Enter cardinality of second set: 1
Enter elements of first set: 1
Enter elements of second set: 1
Elements of set1 find set2: 1
Select the choice:
1.Union 2.find 3.Exit
Choice: