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SEC-III-B

Lab-2

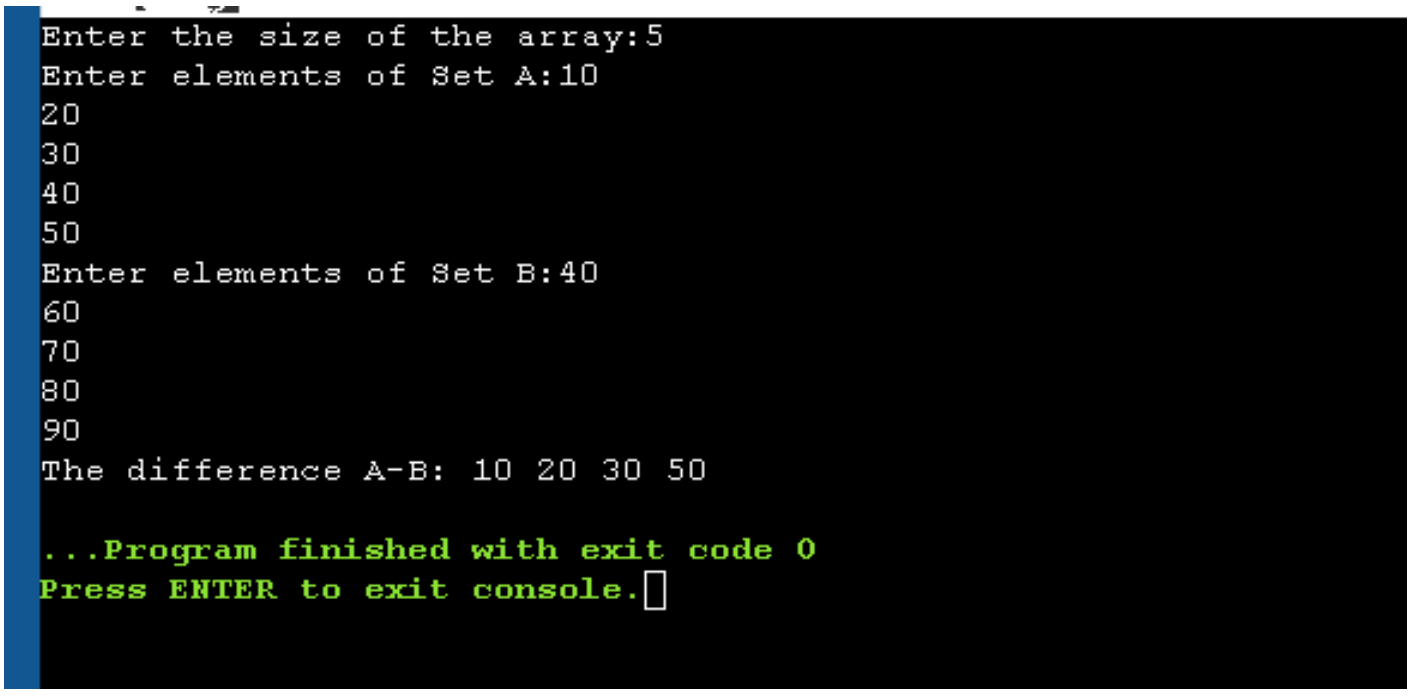
1.Difference between two sets

Code:

```
#include <stdio.h>

int main()

{

int a[100],b[100],c[100],n,k,j,i,p=0;

printf("Enter the size of the array:");

scanf("%d",&n);

printf("Enter elements of Set A:");

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

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

printf("Enter elements of Set B:");

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

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

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

{

k=0;

for(j=0;j<n;j++)
```

```
{

if(a[i]==b[j])

k++;

}

if(k==0)

c[p++]=a[i];

}

printf("The difference  A-B: ");

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

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

return 0;

}
```

Output



2.Symetric Difference between two sets:

Code:

```
#include <stdio.h>

int main()

{

   int a[100],b[100],c[200],n,i,j,k,m=0;

printf("Enter array size:");

    scanf("%d",&n);

    printf("\nEnter elements of Set A:");

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

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

    printf("\nEnter elements of Set B:");

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

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

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

   {

    k=0;

for(j=0;j<n;j++)
```

```
   {
if(a[i]==b[j])
k++;
      }
      if(k==0)
c[m++]=a[i];
   }
   for(i=0;i<n;i++)
   {       k=0;
for(j=0;j<n;j++)
      {
if(b[i]==a[j])
k++;
      }
      if(k==0)
c[m++]=b[i];
   }
   printf(" Symmetric difference is: ");
for(i=0;i<m;i++)     printf("%d ",c[i]);
return 0;
}
```

Output

```
Enter array size:5
Enter elements of Set A:3
5
7
9
11
Enter elements of Set B:2
4
7
9
10
 Symmetric difference is: 3 5 11 2 4 10

...Program finished with exit code 0
Press ENTER to exit console.
```