

```
/*array union*/
```

```
#include <stdio.h>
```

```
void printUnion(int array1[], int size1, int array2[], int size2) {
```

```
    int index1 = 0, index2 = 0;
```

```
    while(index1 < size1 && index2 < size2) {
```

```
        if (array1[index1] < array2[index2])
```

```
            printf("%d ", array1[index1++]);
```

```
        else if (array2[index2] < array1[index1])
```

```
            printf("%d ", array2[index2++]);
```

```
        else {
```

```
            printf("%d ", array2[index2]);
```

```
            index1++;
```

```
            index2++;
```

```
        }
```

```
    }
```

```
    while(index1 < size1)
```

```
        printf("%d ", array1[index1++]);
```

```
    while(index2 < size2)
```

```
        printf("%d ", array2[index2++]);
```

```
}
```

```
int main(){
```

```
    int n,m;
```

```
    printf("Enter number of 1st array elements\n");
```

```
    scanf("%d",&n);
```

```
        printf("Enter number of 2nd array elements\n");
        scanf("%d",&m);
int array1[n] ;
int array2[m] ;

        printf("Enter 1st array elemets\n");
        for(int i=0;i<n;i++)
        {
                scanf("%d",&array1[i]);
        }
        printf("Enter 2nd array elemets\n");
        for(int i=0;i<m;i++)
        {
                scanf("%d",&array2[i]);
        }
        printf("New array elements are\n");

printUnion(array1, n, array2, m);

return 0;
}
```

```
C:\Users\HP\Downloads\array union.exe
Enter number of 1st array elements
5
Enter number of 2nd array elements
6
Enter 1st array elements
1
2
3
4
5
Enter 2nd array elements
6
7
8
9
10
11
Now array elements are
1 2 3 4 5 6 7 8 9 10 11
-----
Process exited after 11.12 seconds with return value 0
Press any key to continue . . .
```