Merge two sorted array and store in a third array

```
#include <stdio.h>

  Void main()

 {

    Int arr1[50], arr2[50], arr3[100], m, n, I, j, k = 0;

    Printf("\n Enter size of array Array 1: ");

    Scanf("%d", &m);

    Printf("\n Enter sorted elements of array 1: \n");

    For (I = 0; I < m; i++)

    {

       Scanf("%d", &arr1[i]);

    }

    Printf("\n Enter size of array 2: ");

    Scanf("%d", &n);

    Printf("\n Enter sorted elements of array 2: \n");

    For (I = 0; I < n; i++)

    {

       Scanf("%d", &arr2[i]);

    }

    I = 0;

    J = 0;

    While (I < m && j < n)

    {

       If (arr1[i] < arr2[j])

       {

          Arr3[k] = arr1[i];

          I++;

       }

       Else
```

```
      {

         Arr3[k] = arr2[j];

         J++;

      }

      K++;

   }

   If (I >= m)

   {

      While (j < n)

      {

         Arr3[k] = arr2[j];

         J++;

         K++;

      }

   }

   If (j >= n)

   {

      While (I < m)

      {

         Arr3[k] = arr1[i];

         I++;

         K++;

      }

   }

   Printf("\n After merging array is: \n");

   For (I = 0; I < m + n; i++)

   {

      Printf("\n%d", arr3[i]);

   }
```

}