

Aim:

To merge two arrays into one.

Algorithm:

1. Read sizes and elements of two arrays.
2. Copy elements of both arrays into a new array.

Code:

```
#include <stdio.h>

int main() {
    int a[100], b[100], c[200], n1, n2, i;
    printf("Enter size of first array: ");
    scanf("%d", &n1);
    printf("Enter elements of first array:\n");
    for (i = 0; i < n1; i++)
        scanf("%d", &a[i]);

    printf("Enter size of second array: ");
    scanf("%d", &n2);
    printf("Enter elements of second array:\n");
    for (i = 0; i < n2; i++)
        scanf("%d", &b[i]);

    for (i = 0; i < n1; i++)
        c[i] = a[i];
    for (int j = 0; j < n2; j++)
        c[i++] = b[j];

    printf("Merged array:\n");
    for (int k = 0; k < n1 + n2; k++)
        printf("%d ", c[k]);
    return 0;
}
```

Input:

[1 2 3] and [4 5 6]

Output:

```
Merged array: 1 2 3 4 5
```

```
=== Code Execution Successful ===
```