Experiment 28: Bubble Sort

Code:

```
#include <stdio.h>

int main() {
    int arr[100], n, i, j, temp;

    printf("Enter number of elements: ");
    scanf("%d", &n);

    printf("Enter %d elements:\n", n);
    for(i = 0; i < n; i++)
        scanf("%d", &arr[i]);

    printf("Original array: ");
    for(i = 0; i < n; i++)
        printf("%d ", arr[i]);
    printf("\n");

    // Bubble Sort
    for(i = 0; i < n - 1; i++) {
        for(j = 0; j < n - i - 1; j++) {
            if(arr[j] > arr[j + 1]) {
                temp = arr[j];
                arr[j] = arr[j + 1];
                arr[j + 1] = temp;
```

```
        }
      }
    }

    printf("Sorted array (Bubble Sort): ");
    for(i = 0; i < n; i++)
        printf("%d ", arr[i]);
    printf("\n");

    return 0;
}
```

Output:

```
Enter number of elements: 5
Enter 5 elements:
50 20 90 40 10
Original array: 50 20 90 40 10
Sorted array (Bubble Sort): 10 20 40 50 90


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