```c
#include <stdio.h>

int main() {
    int arr[100], n = 0, choice, i, pos, elem;

    while (1) {
        printf("\nArray Operations Menu:\n");
        printf("1. Insert\n");
        printf("2. Delete\n");
        printf("3. Display\n");
        printf("4. Exit\n");
        printf("Enter your choice (1-4): ");
        scanf("%d", &choice);

        switch (choice) {
            case 1: // Insert
                if (n >= 100) {
                    printf("Array is full. Cannot insert more elements.\n");
                } else {
                    printf("Enter element to insert: ");
                    scanf("%d", &elem);
                    printf("Enter position (0 to %d): ", n);
                    scanf("%d", &pos);

                    if (pos < 0 || pos > n) {
                        printf("Invalid position!\n");
                    } else {
                        for (i = n; i > pos; i--) {
                            arr[i] = arr[i - 1];
                        }
                        arr[pos] = elem;
                        n++;
                        printf("Element inserted successfully.\n");
                    }
                }
                break;

            case 2: // Delete
                if (n == 0) {
                    printf("Array is empty. Nothing to delete.\n");
                } else {
                    printf("Enter position to delete (0 to %d): ", n - 1);
                    scanf("%d", &pos);

                    if (pos < 0 || pos >= n) {
                        printf("Invalid position!\n");
                    } else {
                        elem = arr[pos];
```

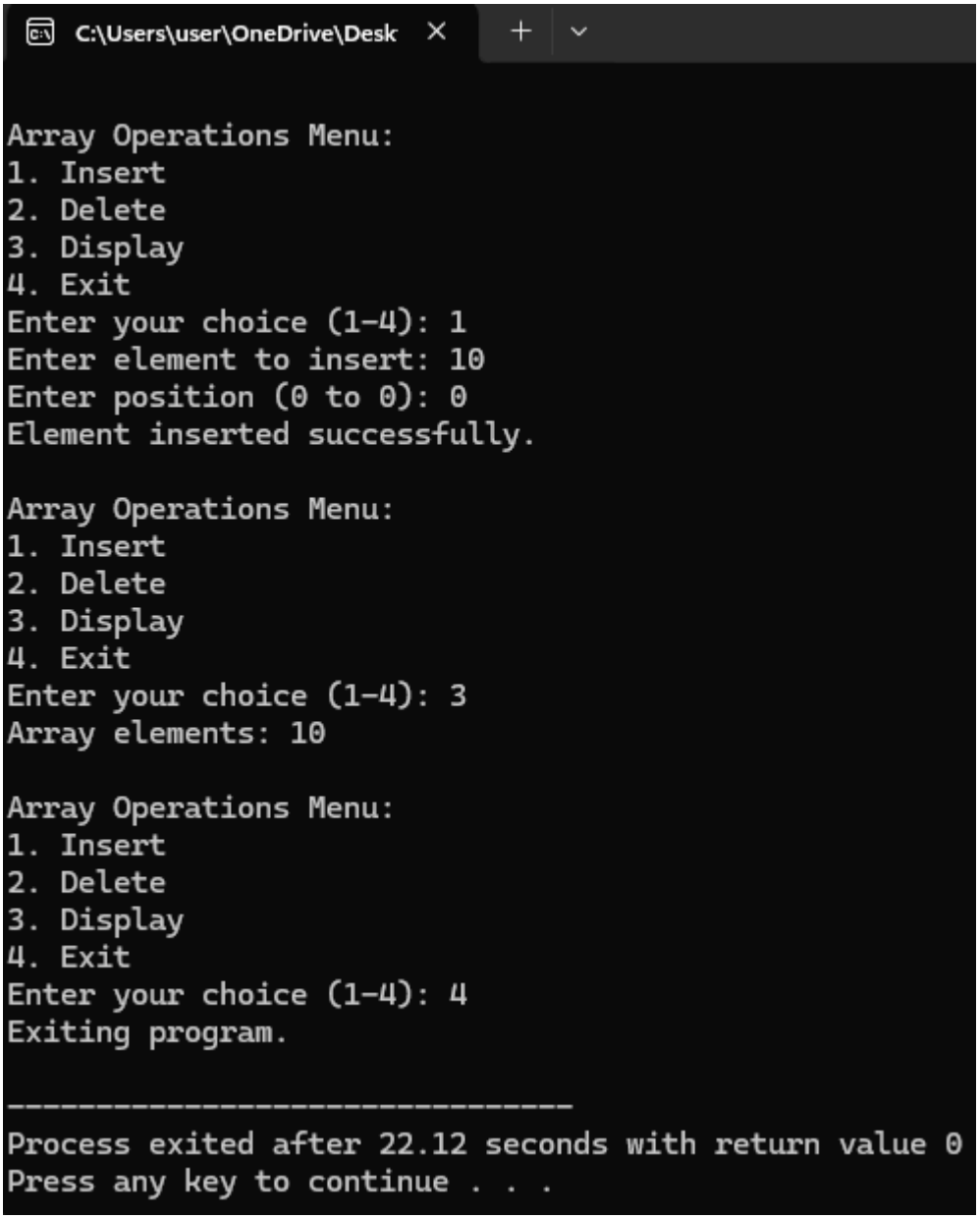
```
                for (i = pos; i < n - 1; i++) {
                    arr[i] = arr[i + 1];
                }
                n--;
                printf("Element %d deleted successfully.\n", elem);
            }
        }
        break;

    case 3: // Display
        if (n == 0) {
            printf("Array is empty.\n");
        } else {
            printf("Array elements: ");
            for (i = 0; i < n; i++) {
                printf("%d ", arr[i]);
            }
            printf("\n");
        }
        break;

    case 4: // Exit
        printf("Exiting program.\n");
        return 0;

    default:
        printf("Invalid choice! Please select from 1 to 4.\n");
    }
  }

  return 0;
}
```


C:\Users\user\OneDrive\Desk
Array Operations Menu:
1. Insert
2. Delete
3. Display
4. Exit
Enter your choice (1-4): 1
Enter element to insert: 10
Enter position (0 to 0): 0
Element inserted successfully.
Array Operations Menu:
1. Insert
2. Delete
3. Display
4. Exit
Enter your choice (1-4): 3
Array elements: 10
Array Operations Menu:
1. Insert
2. Delete
3. Display
4. Exit
Enter your choice (1-4): 4
Exiting program.

Process exited after 22.12 seconds with return value 0
Press any key to continue . . .