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#include <stdio.h>
#include <stdlib.h>
#define MAXSIZE 50
int arr[MAXSIZE];
int size = 0;
void display() {
    int i;
    if(size == 0) {
        printf("array is empty\n");
    }else{
        for(i = 0; i < size; i++) {
            printf("%d ", arr[i]);
        }
        printf("\n");
    }
}
void insertAtPosition(int position, int element) {
    int i;
    for(i = size; i > position; i--) {
        arr[i] = arr[i - 1];
    }
    arr[position] = element;
    size++;
}
void deleteAtposition(int position) {
    int i;
    for(i = position; i < size - 1; i++) {
        arr[i] = arr[i + 1];
    }
    size--;
```

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}
int main() {
    while (1) {
        printf("1. Insert END\n");
        printf("2. Insert Specified Position\n");
        printf("3. Delete Specified position\n");
        printf("4. Display\n");
        printf("5. Exit\n");
        int choice;
        int position;
        int element;
        printf("enter your choice: ");
        scanf("%d", &choice);
        switch(choice) {
            case 1:
                if (size == MAXSIZE) {
                    printf("Array is full\n");
                    break;
                }
                printf("enter the element to be inserted: ");
                scanf("%d", &element);
                arr[size] = element;
                size++;
                break;
            case 2:
                if (size == MAXSIZE) {
                    printf("array is full\n");
                    break;
                }
                printf("enter the position");

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scanf("%d", &position);
if (position < 0) {
    printf("invalid position\n");
    break;
}
printf("enter the element to be inserted: ");
scanf("%d", &element);
insertAtPosition(position, element);
break;
case 3:
    if (size == 0) {
        printf("array is empty\n");
        break;
    }
    printf("enter the position to delete:");
    scanf("%d",&position);
    if (position < 0 || position >= size) {
        printf("invalid position\n");
        break;
    }
    deleteAtposition(position);
    break;
case 4:
    display();
    break;
case 5:
    exit(0);
default:
    printf("invalid choice\n");
}
```

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}  
return 0;  
}
```