C program to insert and delete elements in an array

Algorithm

1. Start

2. Input n

3. Display enter array elements
   for (i = 0; i < n; i++)
   input a[i]

4. Enter the choice z for insertion or deletion
   Input ch

5. Switch (ch)

   Case 1: Input pos, etz
   
   for (i = n-1; i >= pos; i--)
   a[i+1] = a[i]
   a[pos] = etz
   n++
   Display array after insertion
   for (i = 0; i < n; i++)
   output a[i]
   break

   Case 2: Input pos, etz
   etz = a[pos]
   for (i = pos; i < n-1; i++)
   n--
   Display array after deletion
   for (i = 0; i < n; i++)
   output a[i]
   break;
   default : Display invalid choice

6. Stop

# Flowchart:

```
                    ( Start )
                        |
                        v
                  / Input /
                        |
                        v
        / Enter array elements /
        /    Input a[i]        /
                        |
                        v
        +---------------------------+
        | Enter the choice, for     |
        | insertion or deletion.    |
        |      Input ch             |
        +---------------------------+
                        |
                        v
        +---------------------------+
        |      Switch (ch)          |
        +---------------------------+
                        |
                        v
        < Case 1 >  True   +-----------------------------+
                  ------>  | Input pos, ele              |
                        |  | for (i=n-1; i>pos; i--      |
                        |  |     a[i+1] = a[i]           |
                        |  |   a[pos] = ele              |
                        |  |      n++                    |
                        |  | Display array after         |
                        |  |      insertion              |
                        |  |   output a[i]               |
                        |  |      break                  |
                        |  +-----------------------------+
                        |
        < Case 2 >  True   +-----------------------------+
                  ------>  | Input pos, ele              |
                        |  |   ele = a[pos]              |
                        |  | for (i>pos; i<n-1; i++)     |
                        |  |   a[i] = a[i+1]             |
                        |  |      n--                    |
                        |  | array after deletion        |
                        |  |  for (i=0; i<n; i++)        |
                        |  |   output a[i]               |
                        |  |      break                  |
                        |  +-----------------------------+
                        |
        < Default > True   +-----------------------------+
                  ------>  |      Invalid choice         |
                           +-----------------------------+
                                                    ( Stop )
```