#*include*<stdio.h>

#*include*<stdlib.h>

int *main*()

{

    int n;

    int option;

    int new\_element;

    int position;

    char repeat;

*printf*("\n -> Insertion Option Menu:\n");

*printf*("\nSelect the number for the task you want to perform.\n");

*printf*("1- Beginning Insertion.\n2- Middle Insertion.\n3- End Insertion.\n");

*printf*("\nCreate an array: \n");

*printf*("Enter number of elements: ");

*scanf*("%d", &n);

    int \*array = (int \*)*malloc*(n \* sizeof(int));

*printf*("\nEnter the %d elements of the array: \n", n);

*for*(int i = 0; i < n; i++){

*printf*("Element %d: ", i);

*scanf*("%d", &array[i]);

    }

*printf*("The array is: \n");

*for*(int i = 0; i < n; i++) {

*printf*("%d ", array[i]);

    } *printf*("\n\n");

*do* {

*printf*("Select the task (1-3): ");

*scanf*("%d", &option);

*printf*("\n");

*switch*(option)

            {

*case* 1:

*printf*("Enter value to be inserted: ");

*scanf*("%d", &new\_element);

*for*(int i = n; i >= 0; i--) {

                        array[i] = array[i - 1];

                    }

                    array[0] = new\_element;

*printf*("New array: ");

*for*(int i = 0; i <= n; i++){

*printf*("%d ", array[i]);

                    } *printf*("\n\n");

*break*;

*case* 2:

*printf*("Enter value to be inserted: ");

*scanf*("%d", &new\_element);

*printf*("Which position do you want to insert at: ");

*scanf*("%d", &position);

                    n = n + 1;

*for*(int i = n; i >= position; i--) {

                        array[i] = array[i - 1];

                    }

                    array[position] = new\_element;

*printf*("New array: ");

*for*(int i = 0; i <= n; i++){

*printf*("%d ", array[i]);

                    } *printf*("\n\n");

*break*;

*case* 3:

*printf*("Enter value to be inserted: ");

*scanf*("%d", &new\_element);

*printf*("Element inserted: %d\n", new\_element);

                    n = n + 1;

                    array[n] = new\_element;

*printf*("New array: ");

*for*(int i = 0; i <= n; i++){

*printf*("%d ", array[i]);

                    } *printf*("\n\n");

*break*;

*default*:

*printf*("Selected option does not exist.\n");

*printf*("Please choose from 1-3 only...\n\n");

*break*;

            }

*printf*("Do you want to continue (Y/N): ");

*scanf*(" %c", &repeat);

*printf*("\n");

    }

*while*(repeat == 'Y' || repeat == 'y');

*free*(array);

*return* 0;

}