

**NAME: B.PRIYANKA(192421206)**

**COURSE NAME : DATA STRUCTURES FOR MODERN COMPUTING SYSTEMS**

**COURSE CODE : CSA0302**

**10.** **WRITE A C PROGRAM TO PERFORM** **INSERT AN ELEMENT IN AN ARRAY**

**C PROGRAMMING CODE:**

#include <stdio.h>

int main() {

int arr[100], n, pos, val, i;

printf("Enter number of elements: ");

scanf("%d", &n);

printf("Enter %d elements: ", n);

for (i = 0; i < n; i++)

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

printf("Enter position to insert (1-%d): ", n + 1);

scanf("%d", &pos);

printf("Enter value to insert: ");

scanf("%d", &val);

for (i = n; i >= pos; i--)

arr[i] = arr[i - 1]; // shift elements right

arr[pos - 1] = val; // insert element

n++;

printf("Array after insertion: ");

for (i = 0; i < n; i++)

printf("%d ", arr[i]);

return 0;

}

**OUTPUT:**

