Assignment 11

```
Before sorting array elements are -
12 31 25 8 32 17
After sorting array elements are -
8 12 17 25 31 32
```

```c
#include <stdio.h>


void insert(int a[], int n) /* function to sort an aay with insertion sort */

{

    int i, j, temp;

    for (i = 1; i < n; i++) {

        temp = a[i];

        j = i - 1;


        while(j>=0 && temp <= a[j])  /* Move the elements greater than temp to one position
ahead from their current position*/

        {

            a[j+1] = a[j];

            j = j-1;

        }

        a[j+1] = temp;

    }

}


void printArr(int a[], int n) /* function to print the array */

{
```

```c
    int i;

    for (i = 0; i < n; i++)
        printf("%d ", a[i]);
}


int main()
{
    int a[] = { 12, 31, 25, 8, 32, 17 };

    int n = sizeof(a) / sizeof(a[0]);

    printf("Before sorting array elements are - \n");

    printArr(a, n);

    insert(a, n);

    printf("\nAfter sorting array elements are - \n");

    printArr(a, n);


    return 0;
}
```