

```
#include <stdio.h>
```

```
void insert(int a[], int n)
```

```
{  
    int i, j, temp;  
    for (i = 1; i < n; i++) {  
        temp = a[i];  
        j = i - 1;  
  
        while(j >= 0 && temp <= a[j])  
        {  
            a[j+1] = a[j];  
            j = j-1;  
        }  
        a[j+1] = temp;  
    }  
}
```

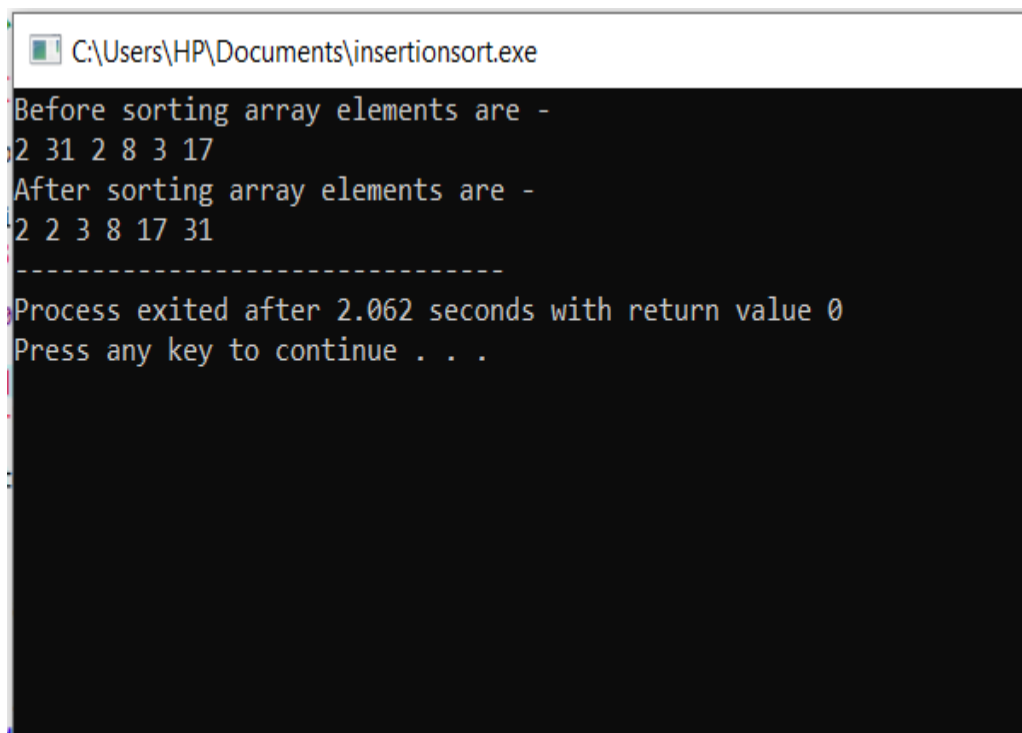
```
void printArr(int a[], int n)
```

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

```
int main()
```

```
{  
    int a[] = { 2, 31, 2, 8, 3, 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;  
}
```



The screenshot shows a Windows command prompt window titled "C:\Users\HP\Documents\insertionsort.exe". The output of the program is as follows:

```
Before sorting array elements are -  
2 31 2 8 3 17  
After sorting array elements are -  
2 2 3 8 17 31  
-----  
Process exited after 2.062 seconds with return value 0  
Press any key to continue . . .
```