

Question 1

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

```
void insertion_sort(int a[], int n);
```

```
int main()
```

```
{
```

```
    int arr[5]={9,5,0,8,2},i;
```

```
    insertion_sort(arr,5);
```

```
    for(int i=0;i<5;i++)
```

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

```
    return 0;
```

```
}
```

```
void insertion_sort(int arr[], int n)
```

```
{
```

```
    int key,temp;
```

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

```
    {
```

```
        key=arr[i+1];
```

```
        for(int j=i+1;j>0;j--)
```

```
        {
```

```
            if(key<arr[j-1])
```

```
            {
```

```
                arr[j]=arr[j-1];
```

```
        arr[j-1]=key;
    }
}
}
```