WEEK 5

```c
#include<stdio.h>
void quicksort(int number[25],int first,int last)
{
    int i, j, pivot, temp;
    if(first<last)
    {
        pivot=first;
        i=first;
        j=last;
        while(i<j)
        {
            while(number[i]<=number[pivot]&&i<last)
            i++;
            while(number[j]>number[pivot])
            j--;
            if(i<j)
            {
                temp=number[i];
                number[i]=number[j];
                number[j]=temp;
            }
        }
        temp=number[pivot];
        number[pivot]=number[j];
        number[j]=temp;
        quicksort(number,first,j-1);
        quicksort(number,j+1,last);
    }
```

```c
}
int main()
{
    int i, count, number[25];
    printf("Enter the size of array: ");
    scanf("%d",&count);
    printf("Enter %d elements: ", count);
    for(i=0;i<count;i++)
    scanf("%d",&number[i]);
    quicksort(number,0,count-1);
    printf("Order of Sorted elements: ");
    for(i=0;i<count;i++)
    printf(" %d",number[i]);
    return 0;
}
```

Output :

```
Enter the size of array: 5
Enter 5 elements: 10 8 12 7 2
Order of Sorted elements:  2 7 8 10 12
Process returned 0 (0x0)   execution time : 12.319 s
Press any key to continue.
```