

```
1  #Program to implement Quick Sort
2
3  def print_array(a):
4      for i in a:
5          print(i,end=" ")
6      print("\n")
7  def partition(a,p,r):
8      i=p-1
9      pivot=a[r]
10     for j in range(p,r):
11         if(a[j]<pivot):
12             i=i+1
13             a[i],a[j]=a[j],a[i]
14     a[i+1],a[r]=a[r],a[i+1]
15     return (i+1)
16 def quick_sort(a,p,r):
17     if(p<r):
18         q=partition(a,p,r)
19         quick_sort(a,p,q-1)
20         quick_sort(a,q+1,r)
21 import random
22 n = 10;a = []
23 for i in range(n):
24     a.append(random.randint(3, 100))
25 print("Array Before Sorting",end=" ")
26 print_array(a)
27 print("Array After Sorting",end=" ")
28 quick_sort(a,0,n-1)
29 print_array(a)
```