1. Show the detailed simulation of the Binary Search algorithm for the search key 26 using the data mentioned below:

   15 25 31 37 41 56 62 82 93 99

2. Show the detailed simulation of the Counting Sort algorithm for the data given below(Range 0-6).[7]

   6 1 5 0 2 5 6 5 3 1 5

3. Discuss the best case time complexity of the following algorithm. [6]

```
sum=0
for i in range(0, n):
    for j in range(0, i+1):
        if a[j]<a[i]:
        sum=sum+a[j]
print(sum)
```