**1**.logn

**2.** Give the output printed by Queue for the input at the end of all operations  
If “-” perform dequeue else enqueue each word.

Playing Cricket - is - a hobby - - of - - mentor – Deepak

Playing Cricket -

Cricket is -

Is a hobby -

A hobby –

Hobby of -

Of –

Mentor –

Deepak

The output would be “**Deepak**”

**3**.b,d,e

**4.**

**5.**Size of stack after every interation 1,2,1,2,1,0

**6.**N

**7.**NLOGN

**8.**1

**9**.N^2

**10. step-1(3-4)**

0 1 2 4 4 5 6 7 8 9

**step-2(4-9)**

0 1 2 9 9 5 6 7 8 9

**Step -3 (8-0)**

0 1 2 9 9 5 6 7 0 9

**Step -4 (2-3)**

0 1 9 9 9 5 6 7 0 9

**Step-5(5-6)**

0 1 9 9 9 6 6 7 0 9

**Step-6(5-9)**

0 1 9 9 9 9 9 7 0 9

**Step -7 (7-3)**

0 1 9 9 9 5 6 9 0 9

**Step -8 (4-8)**

0 1 0 0 0 0 0 0 0 0

**Step -9( 6-1)**

1 1 1 1 1 1 1 1 1 1

The number of components left is “**1**”