Name :-

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Subject :- DSA

Assignment 8

Question 1

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PS C:\IIITS ASSIGNMENTS\Sem 2\Data Structure And Algo\Assignment 8> cd "c:\IIITS ASSIGNMENTS\Sem 2\Data Structure And Algo\Assignment 8\" ; if ($?) { gcc S20230010193_A8.c -o S2
0230010193_A8 } ; if ($?) { .\S20230010193_A8 }
Enter the Question number that you have to run: 1
50 is pushed in queue
after pushing front = 2 , rear = 0
60 is pushed in queue
after pushing front = 2 , rear = 1
if we try pushing 30
queue is full, push operation not done
10 is pop from queue
after pop front = 3 , rear = 1
20 is pop from queue
after pop front = 4 , rear = 1
70 is pushed in queue
after pushing front = 4 , rear = 2
80 is pushed in queue
after pushing front = 4 , rear = 3
queue is full, push operation not done
printing elements in queue: 40 50 60 70 80
```

Question 2

```
PS C:\IIITS ASSIGNMENTS\Sem 2\Data Structure And Algo\Assignment 8> cd "c:\IIITS ASSIGNMENTS\Sem 2\Data Structure And Algo\Assignment 8\" ; if ($?) { gcc S20230010193_A8.c -o S2
0230010193_A8 } ; if ($?) { .\S20230010193_A8 }
Enter the Question number that you have to run: 2
Enter size of array: 9
Enter array elements: 0
0
1
1
1
1
1
0
0
ans:1
```

Question 3

```
PS C:\IIITS ASSIGNMENTS\Sem 2\Data Structure And Algo\Assignment 8> cd "c:\IIITS ASSIGNMENTS\Sem 2\Data Structure And Algo\Assignment 8\" ; if ($?) { gcc S20230010193_A8.c -o S
0230010193_A8 } ; if ($?) { .\S20230010193_A8 }
Enter the Question number that you have to run: 3
Enter size of array: 5
Enter array elements: 40
50
60
10
30
enter the element which has to be search: 40
position of searchkey is 0
```

Question 4

```
PS C:\IIITS ASSIGNMENTS\Sem 2\Data Structure And Algo\Assignment 8> cd "c:\IIITS ASSIGNMENTS\Sem 2\Data Structure And Algo\Assignment 8\" ; if ($?) { gcc S20230010193_A8.c -o S2
0230010193_A8 } ; if ($?) { .\S20230010193_A8 }
Enter the Question number that you have to run: 4
Enter the size of the array: 6
Enter the elements: 5
29
20
0
27
18
Collision occurred for 20 at 2
Collision occurred for 0 at 0
Collision occurred for 27 at 0
Collision occurred for 18 at 0
Collision occurred for 18 at 1
Collision occurred for 18 at 2
Collision occurred for 18 at 3
Final table values:
hash[0] = -1
hash[1] = 27
hash[2] = 29
hash[3] = 20
hash[4] = 18
hash[5] = 5
hash[6] = 0
hash[7] = 0
hash[8] = 0
```