

1. Implement Template based Queue using a static circular array. Make the array size 10.
2. Implement Template based Queue using a dynamic circular array.
3. Implement Template based Queue using a singly linked-list.
4. Write a program that takes n as input and generates binary representation of all numbers from 1 to n using a queue. You can use the builtin STL Queue for this problem.

| Sample Input | Sample Output  |
|--------------|--|
| 6            | 1 -> 1<br>2 -> 10<br>3 -> 11<br>4 -> 100<br>5 -> 101<br>6 -> 110 |