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  2 -> 10  3 -> 11  4 -> 100  5 -> 101  6 -> 110 |