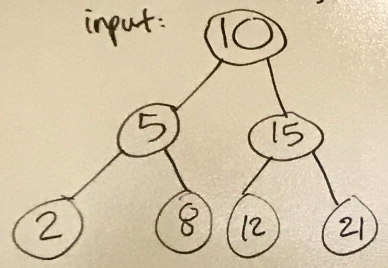
## Problem Domain

Write a breadth first traversal method which takes a Binary Tree as its unique input, traverse the tree using breadth first, and print every visited nodes value.

input:




output: 10, 5, 15, 2, 8, 12, 21

Big O()
time O(n)
space O(n)

## Algorithm

Given a Binary Tree as input,
create a queue that has all
the standard methods.
Enqueue the root node ← create a current node & temp node
create an output string
While the queue has a valid node
Set currentNode to front node value
of queue (dequeue)
if current node has a left child
enqueue current node left child
if current node has a right child
enqueue current node right child
assign queue.dequeue to temp node
add temp node value to output string
return

if binary tree empty return empty string

## Edge case

- Binary tree is None returns empty string

## Code

```
from stack_and_queue import Queue
def breadth_first_traversal(binary_tree):
    queue = Queue()
    if binary_tree.root_node is None
        return output
    output = ''
    queue.enqueue(binary_tree.root_node)
    temp = Node()
    current = Node()
    while queue.peek():
        current = queue.dequeue()
        if current._left_child:
            queue.enqueue(current._left_child)
        if current._right_child:
            queue.enqueue(current._right_child)
        temp = queue.dequeue()
        output += temp.value
    return output
```