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**Program : BSCS 3-1**

**Question : 1**

```
#include <iostream>

#include <queue>

using namespace std;

void enqueue(queue<string>& q, const string& element) {
    q.push(element);
}

void dequeue(queue<string>& q) {
    if (!q.empty()) {
        cout << "Dequeued: " << q.front() << endl;
        q.pop();
    } else {
        cout << "Queue is empty!" << endl;
    }
}

void displayQueue(queue<string> q) {
    while (!q.empty()) {
        cout << q.front() << " ";
        q.pop();
    }
    cout << endl;
}

int main() {
    queue<string> q;
    enqueue(q, "Pineapple");
```

```

enqueue(q, "Strawberry");
enqueue(q, "Guava");

// Display the queue
cout << "Queue: ";
displayQueue(q);

// Dequeue elements
dequeue(q);
dequeue(q);

// Display the queue again
cout << "Queue after dequeuing: ";
displayQueue(q);

return 0;
}

```

```

Queue: Pineapple Strawberry Guava
Dequeued: Pineapple
Dequeued: Strawberry
Queue after dequeuing: Guava

```

### Question : 2

```

#include <iostream>
#include <sstream>
using namespace std;

int main() {
    string input;

```

```

cout << "Enter a string: ";
getline(cin, input);

stringstream queue;
string word;

for (int i = 0; i < input.length(); i++) {
    if (input[i] == ' ') {
        queue << "Q" << i + 1 << "-" << word << " ";
        word.clear();
    } else {
        word += input[i];
    }
}

queue << "Q" << input.length() << "-" << word;

cout << "Concatenated queue: " << queue.str() << endl;

return 0;
}

```

```

Enter a string: Sinwan haider
Concatenated queue: Q7-Sinwan Q14-haider
Q14-

```