```cpp
#include <iostream>
#include <queue>
#include <set>
#include <stack>
using namespace std;

queue<int> reverseQueue(queue<int> input) {
    queue<int> result;
    stack<int> temp;

    while(!input.empty()) {
        temp.push(input.front());
        input.pop();
    }
    while(!temp.empty()) {
        result.push(temp.top());
        temp.pop();
    }
    return result;
}

set<int> makeUnion(set<int> s1, set<int> s2) {
    set<int> result;

    set<int>::iterator iter = s1.begin();
    while(iter != s1.end()) {
        result.insert(*iter);
        iter++;
    }
    set<int>::iterator itera = s2.begin();
    while(itera != s2.end()) {
        result.insert(*itera);
        itera++;
    }
    return result;
}

stack<int> removeNegative(stack<int> input) {
```

```
39      stack<int> result, temp;
40
41      while(!input.empty()) {
42          if(input.top() >= 0)
43              temp.push(input.top());
44          input.pop();
45      }
46      while(!temp.empty()) {
47          result.push(temp.top());
48          temp.pop();
49      }
50
51      return result;
52  }
53
54
55  int main()
56  {
57      std::cout << "Hello, World!" << std::endl;
58
59      cout << endl << "Problem 0" << endl;
60      queue<int> q;
61      q.push(1); //gets food first
62      q.push(2);
63      q.push(3); //gets food last. can't get here
    without getting to the preceding ones
64
65      queue<int> reversedQ = reverseQueue(q);
66      while(!reversedQ.empty()) {
67          cout << reversedQ.front() << endl;
68          reversedQ.pop();
69      }
70
71      cout << endl << "Problem 1" << endl;
72      set<int> s1, s2;
73      s1.insert(1);
74      s1.insert(2);
75      s2.insert(1);
```

```
 76      s2.insert(3);
 77      s2.insert(4);
 78
 79      set<int> unionized = makeUnion(s1, s2);
 80      set<int>::iterator iter = unionized.begin();
 81      while(iter != unionized.end()) {
 82          cout << *iter << endl;
 83          iter++;
 84      }
 85
 86      cout << endl << "Problem 2" << endl;
 87
 88      stack<int> st;
 89      st.push(1);
 90      st.push(-1);
 91      st.push(-11);
 92      st.push(10);
 93
 94      stack<int> posS = removeNegative(st);
 95      while(!posS.empty()) {
 96          cout << posS.top() << endl;
 97          posS.pop();
 98      }
 99
100      return 0;
101  }
102
```