This quiz is out of 10 points: 2 for your name and 8 for answering the questions correctly. Clearly indicate your answers by putting a box or circle around them. There is no partial credit on this quiz. You have 10 minutes to complete this quiz.

1. (4 points)

Draw the above AVL tree after inserting the key 5.

2. (4 points)

```cpp
s.push(1);
s.push(2);
std::cout << s.pop() << std::endl;
s.push(3);
s.push(4);
std::cout << s.pop() << std::endl;
s.push(5);
std::cout << s.pop() << std::endl;
std::cout << s.pop() << std::endl;

q.enqueue(1);
q.enqueue(2);
std::cout << q.dequeue() << std::endl;
q.enqueue(3);
q.enqueue(4);
std::cout << q.dequeue() << std::endl;
std::cout << q.dequeue() << std::endl;
q.enqueue(5);
std::cout << q.dequeue() << std::endl;
std::cout << q.dequeue() << std::endl;
```

If `s` is a stack that starts out empty, what is the output of the above code?

If `q` is a queue that starts out empty, what is the output of the above code?