

Study Quiz #6

1. What is the output of the program below?

```
void DivideByZero()
{
    cout << "Line 6" << endl;
    int a = 5, z = 0;
    if (z == 0)
        throw "Divide by 0";
    int b = a / z;
    cout << "Line 7" << endl;
}
```

```
int main()
{
    cout << "Line 1" << endl;
    try
    {
        cout << "Line 2" << endl;
        DivideByZero();
        cout << "Line 4" << endl;
    }
    catch (const char *message)
    {
        cout << message << endl;
    }
    cout << "Line 5" << endl;
    return 0;
}
```

2. For each of the following, if the problem can be handled with C++ exceptions write **YES**. If it can't be handled by an exception, write **NO**.
- a) _____ Attempts to divide by zero
 - b) _____ A missing semi-colon at the end of a statement
 - c) _____ Taking the square root of -345.26
 - d) _____ Misspelled C++ keywords
 - e) _____ An invalid array subscript in a user-defined object
3. For each of the following operations, determine the time required to perform the operation *in the worst case*. If the time is Linear, write **L**. If the time is Constant, write **C**. If the time is Neither Constant nor Linear, write **N**.
- a) _____ Inserting an element at the front of an array.
 - b) _____ Inserting an element at the front of a linked list.
 - c) _____ Finding the Nth element in an array
 - d) _____ Finding the Nth element in a linked list.