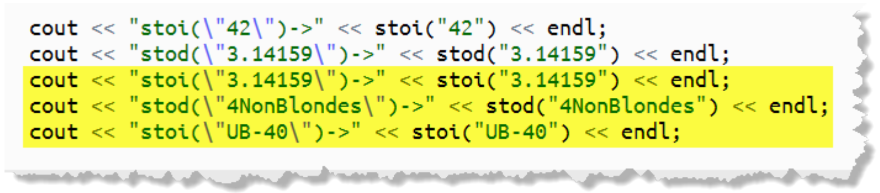
Comparing the Results

Now, go ahead and you run the test program. Use `make 17` to compile and run under C++ 17, and `make 98` to compile and run under C++ 98. Your code should compile under both platforms. When you run it, however, **it doesn't produce exactly the same output** as it does under C++17, which uses the `stoi()` from the standard library.



```
cout << "stoi(\"42\")->" << stoi("42") << endl;
cout << "stod(\"3.14159\")->" << stod("3.14159") << endl;
cout << "stoi(\"3.14159\")->" << stoi("3.14159") << endl;
cout << "stod(\"4NonBlondes\")->" << stod("4NonBlondes") << endl;
cout << "stoi(\"UB-40\")->" << stoi("UB-40") << endl;
```

Look at the lines hightlighted in yellow, where we pass `stod()` or `stoi()` **invalid input**. C++17 and C++98 produce the same output for the first four inputs, but the last one fails entirely. Neither the library nor your version fails on `stoi("3.14159")`. Both convert what they can (the `3`) and leaves the rest. But, the library version **crashes** with `stoi("UB-40")`; there is **no possible conversion**.

So, that means the version we wrote is better, right?
After all, who wants a function that crashes?

Well, not so fast. The question is, **what should** `stod()` and `stoi()` do with invalid input? In the next lesson, we'll use these techniques to look at more **error handling**.