

Take the Quiz Again

Attempt History

	Attempt	Time	Score
KEPT	Attempt 4	17 minutes	15 out of 15
LATEST	Attempt 4	17 minutes	15 out of 15
	Attempt 3	10 minutes	14 out of 15
	Attempt 2	11 minutes	14 out of 15
	Attempt 1	13 minutes	14 out of 15

⚠ Correct answers are hidden.

Submitted Jul 21 at 10:45pm



Question 1

1.5 / 1.5 pts

Match each item with the correct loop form below.

Indefinite limit loop that reduces its input	<div>while (n != 0) { n /= 2; } ▾</div>
Indefinite limit loop that uses successive approximations	<div>while(abs(g1 – g2) >= EPSILON) ▾</div>
Counter-controlled symmetric loop for producing a sequence of data	<div>for (int i=12; i <= 19; i++) { . . . } ▾</div>
Indefinite data loop that uses raw input	<div>while(cin.get(ch)) { . . . } ▾</div>
Counter-controlled asymmetric loop for processing characters	<div>for (size_t i=0, len=s.size(); i < l ▾</div>
Iterator loop that may change its container	<div>for (auto& e : col) { . . . } ▾</div>
Iterator loop that cannot change its container	<div>for (auto e : col) { . . . } ▾</div>
Counter-controlled loop for processing substrings	<div>for (size_t i=4, slen=4, len=s.siz ▾</div>
Indefinite data loop that uses formatted input	<div>while(cin >> n) { . . . } ▾</div>

Question 2

1 / 1 pts

After writing data to an ostream object named os, you can retrieve the string it contains by using:

- ☐ None of these
- ☒ os.str()
- ☐ os.to_string()
- ☐ to_string(os)
- ☐ static_cast<string>(os);

Question 3

1 / 1 pts

Which fragment completes this code segment?

```
string fmt(double n, int decimals)
{
    stringstream out;
    out << fixed << setprecision(decimals);
    out << n;
    return _____;
}
```

- ☐ out.to_string()
- ☐ None of these
- ☐ out
- ☒ out.str()
- ☐ n



Question 4

1.5 / 1.5 pts

Which of the following loop patterns are used here?

```
size_t pos = 0;
char ch;
in.get(ch);
while (ch != 'Q')
{
    pos++;
    in.get(ch);
}
```

☐ inline test

☒ sentinel loop

☐ loop-and-a-half

☐ limit loop

☐ data loop

☐ iterator or range loop

☒ primed loop

☐ counter-controlled loop

Question 5

0.5 / 0.5 pts

In the ***primed loop pattern***, you use a break statement to exit the loop when the sentinel is found.

☐ True

☒ False

Question 6

0.5 / 0.5 pts

A loop that reads data until some special value is found is called a sentinel loop.

☒ True

☐ False

Question 7

0.5 / 0.5 pts

A loop that reads data until the input stream signals that it is done is called a data loop.

☒ True

☐ False

Question 8

1.5 / 1.5 pts

Match each item with the correct standard header below.

Read and write characters to memory using streams	sstream
Connect a disk file to an input or output stream.	fstream
Use the predefined stream objects cin and cout	iostream
Determine the category of a character	cctype
Modify the way that memory is converted to characters on input or output	iomanip

Question 9

1 / 1 pts

What happens when this code fragment compiles and runs?

```
#define N
#ifndef N
    cout << "Hello";
#else
```



```
cout << "Goodbye";
#endif
```

☒ prints "Goodbye"

☐ It does not compile.

☐ prints nothing

☐ prints "Hello"

☐ prints "HelloGoodbye"

Question 101 / 1 pts

Programmers use _____ to reason about logical correctness in their code.

☐ completion codes

☐ assumptions

☒ assertions

☐ exceptions

Question 111 / 1 pts

What term describes this block of code?

```
#if __APPLE__
iostream in(" .75");
int n = 3;
in >> n;
#endif
```

☒ conditional compilation

☐ alternative compilation

☐ compiler directives

☐ proprietary compilation

☐ None of these

☐ selection statements

Question 120.5 / 0.5 pts

The directives #if defined(symbol) and #ifdef symbol mean, essentially, the same thing.

☒ True

☐ False

Question 130.5 / 0.5 pts

The preprocessor operates on code **after** it has been compiled.

☐ True

☒ False

Question 140.5 / 0.5 pts

The #if preprocessor directive may compare double literals but not variables.

☐ True

☒ False

Question 151 / 1 pts

What happens when you execute the following (erroneous) code:

```
cout << stoi(42.5) << endl;
```

☐ No conversion takes place and the output stream is placed in a failed state.

☐ An exception is thrown, which may be caught

☒ The code does not compile because the argument is the wrong type.

☐ The double 42.5 is truncated to 42 and printed

☐ The program prints an error message and terminates since you cannot convert a double to an int

Question 161 / 1 pts

Suppose you have the following code, and `x` is negative. What happens?

```
cout << sqrt(x) * sqrt(x) << endl;
```

☐ The program will terminate with an assertion, since you can't take the square root of a negative number.

☐ The program will throw an exception

☐ The program will not compile

☐ The original value of `x` is printed

☒ The completion code value, `nan`, may be printed signaling an error.

☒ The global error variable, `errno`, may be set to indicate the error

Question 170.5 / 0.5 pts

The standard library version of `sqrt(-2)` throws a runtime exception because there is no possible answer.

☐ True

☒ False

