

Take the Quiz Again

Attempt History

	Attempt	Time	Score
KEPT	<a href="#">Attempt 2</a>	11 minutes	14 out of 15
LATEST	<a href="#">Attempt 2</a>	11 minutes	14 out of 15
	<a href="#">Attempt 1</a>	13 minutes	14 out of 15

Correct answers are hidden.

Submitted Jul 21 at 4:35pm



Question 11.5 / 1.5 pts

Match each item with the correct loop form below.

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

Question 21 / 1 pts

What happens when this code fragment runs?

```
istringstream in("12.5");
int n;
in >> n;
```

- ☒ n is set to 12
- ☐ None of these
- ☐ It throws a runtime exception
- ☐ It compiles, but fails to link
- ☐ It does not compile.
- ☐ It sets an error state in in.

Question 31 / 1 pts

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

- ☐ None of these
- ☐ to\_string(os)
- ☐ os.to\_string()
- ☒ os.str()
- ☐ static\_cast<string>(os);

Question 41.5 / 1.5 pts



Which of the following loop patterns are used here?

```
string s{"Hello CS 150"};
while (s.size())
{
    if (s.at(0) == 'C') break;
    s = s.substr(1);
}
cout << s << endl;
```

☐ inline test

☐ data loop

☐ primed loop

☐ iterator or range loop

☐ limit loop

☒ loop-and-a-half

☒ sentinel loop

☒ counter-controlled loop

Question 50.5 / 0.5 pts

In the **loop-and-a-half**, you use Boolean variable to signal when the sentinel is found.

☐ True

☒ False

Question 60.5 / 0.5 pts

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

☐ True

☒ False

Question 70.5 / 0.5 pts

In the **loop-and-a-half pattern**, you read data before the loop and at the end of the loop.

☐ True

☒ False

Question 81.5 / 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 91 / 1 pts

What term describes this block of code?

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

☒ conditional compilation



☐ compiler directives

☐ proprietary compilation

☐ alternative compilation

☐ selection statements

☐ None of these

Question 10

1 / 1 pts

What happens when this code fragment runs in C++ 11?

```
cout << stoi("one") << endl;
```

☐ stoi() returns 0

☐ It does not compile.

☒ It throws a runtime exception

☐ It sets an error state in cout.

☐ None of these

☐ It compiles, but fails to link

Incorrect

Question 11

0 / 1 pts

What happens when this code fragment compiles and runs?

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

☐ prints nothing

☐ prints "HelloGoodbye"

☐ It does not compile.

☒ prints "Hello"

☐ prints "Goodbye"

Question 12

0.5 / 0.5 pts

Building your code with more than one copy of a function leads to a clash of symbols.

☒ True

☐ False

Question 13

0.5 / 0.5 pts

The standard library version of stoi("UB-40") throws a runtime exception because there is no viable conversion.

☒ True

☐ False

Question 14

0.5 / 0.5 pts

To use different versions of a function depending on the platform is called *conditional compilation*.

☒ True

☐ False

Question 15

1 / 1 pts

What happens when you execute the (erroneous) line:

```
bool ok = 2 + 2 == 5;
```

- ☒ Nothing happens. The variable ok is set to false.
- ☐ The program prints an error message and terminates
- ☐ The program prints an error message and the program continues
- ☐ The code does not compile, since 2 + 2 is not equal to 5
- ☐ An exception is thrown because 2 + 2 does not equal 5

Question 16

1 / 1 pts

Which of these are appropriate uses of the C++ `assert` facility?

- ☐ Validate input received by your program
- ☐ Error conditions (such as file not found)
- ☒ Validate assumptions about your code
- ☒ Validate function arguments under the programmer's control
- ☒ Validate the postcondition of a calculation
- ☒ Debugging checks

Question 17

0.5 / 0.5 pts

The line: `cin >> n;` throws a runtime exception if `n` is an `int` and it tries to read the input "one".

- ☐ True
- ☒ False