## Midterm 3 Study Guide

Due No due date Points 25 Questions 25 Time Limit 30 Minutes Allowed Attempts Unlimited

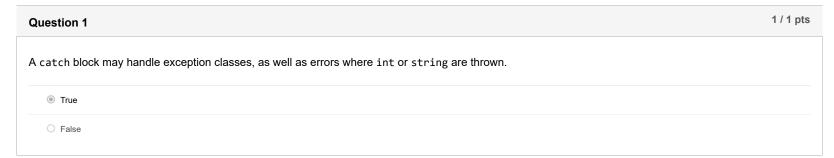
Take the Quiz Again

## Attempt History

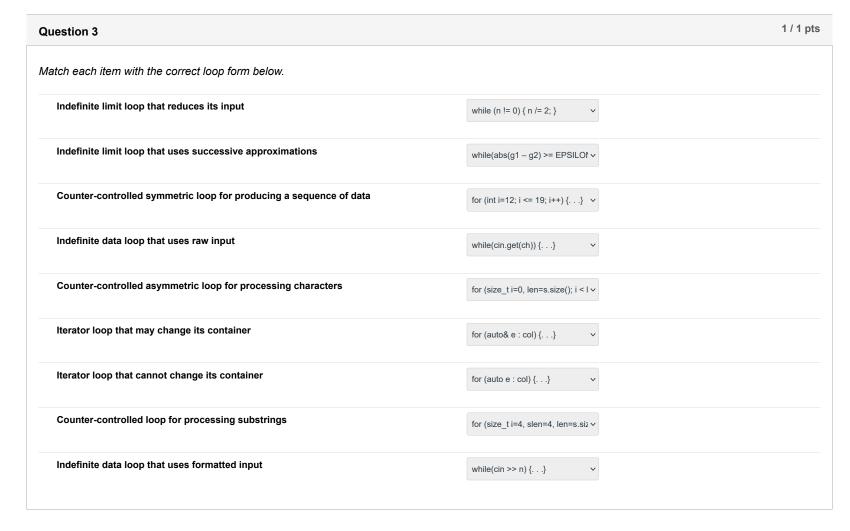
	Attempt	Time	Score
KEPT	Attempt 4	21 minutes	23 out of 25
LATEST	Attempt 7	25 minutes	21.5 out of 25
	Attempt 6	25 minutes	21 out of 25
	Attempt 5	30 minutes	17 out of 25
	Attempt 4	21 minutes	23 out of 25
	Attempt 3	26 minutes	19.89 out of 25
	Attempt 2	30 minutes	22.5 out of 25
	Attempt 1	27 minutes	21 out of 25
	Attempt 5 Attempt 4 Attempt 3 Attempt 2	30 minutes 21 minutes 26 minutes 30 minutes	17 out of 25 23 out of 25 19.89 out of 25 22.5 out of 25

① Correct answers are hidden.

bmitted Jul 12 at 10:03pm







Question 4	1 / 1 pts
Which of the following blocks is designed to catch any type of exception?	
O catch(){ }	
O catch(exception){ }	
O catch(*){ }	
<pre>@ catch(){ }</pre>	

Question 5	1 / 1 pts
A function template may be declared in a header file but must be defined in an implementation file.	
○ True	
False	

Question 6	/ 1 pts
What happens when you execute the following (erroneous) code:	
<pre>istreamstring in("one"); int n; in &gt;&gt; n;</pre>	
The code will not compile, since "one" is not convertible to an int.	
The program prints an error message, but continues running	
The program prints an error message and unconditionally terminates	
The stream is put into a failed state, but the program continues running	
The stream is put into a failed state, so the program terminates	

```
1 / 1 pts
Question 7
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);
   sentinel loop
   counter-controlled loop
   ☐ data loop
   ☐ limit loop
   ☐ loop-and-a-half
   inline test
   primed loop
   ☐ iterator or range loop
```

```
What is true about this code?

template <typename T, typename U>
T pickle(T& a, const U& b) {
    a += b;
    return b;
}
int main() {
    auto x = 42.0;
    auto y = pickle(x, 4.5);
    cout << x << endl;
    cout << y << endl;
}

This code does not comple.

In main, x points 46.5
```

✓ In main, y prints 4.5

Question 9 0.5 / 1 pts

```
What is true about this piece of code?
  template <typename T, typename U>
  T pickle(T& a, const U& b) {
        a += b;
        return b;
  }
  int main()
        int x = 42;
        auto a = pickle(x, 4.5);
        cout << a << endl;</pre>
        cout << x << endl;</pre>
  In main, x prints 46
  ☐ In main, x prints 46.5
  ☐ This code has a syntax error.
  ☐ In main, a prints 4.5
  ☐ In main, a prints 4
```

```
The general, Computer Science term for a collection of variables that have distinct names and types is a record.

True

False
```

A vector represents a linear heterogeneous collection of data.

True

False

```
Assuming the following variable definition, which statement creates an object which refers to the first element in v and which prohibits you from changing v?

vector<double> v{1.2, 2.3, 3.4};

auto b = end(v);

auto d = cend(v);

auto a = begin(v);

None of these

auto c = cbegin(v);
```

Incorrect Question 13

Question 14	1 / 1 pts
What is stored in data after this runs?	
<pre>vector<int> data{1, 2, 3}; data.push_back(0);</int></pre>	
○ []	
O [2, 3]	
O [1, 2]	
<pre>   [1, 2, 3, 0] </pre>	
O [1, 2, 3]	
O None of these	

Question 15	1 / 1 pts
Examine the following code (which is legal). Which statement is <i>illegal</i> ?	
<pre>struct Money { int dollars{0}, cents{0}; } m1, m2;</pre>	
O m2.cents++;	
O m1 = m2;	
O if (m1.cents != m2.dollars)	

Question 17	1 / 1 pts
The declaration: vector <int> v = new vector&lt;&gt;(); creates a vector object with no elements.</int>	
○ True	
False	

Question 18	1 / 1 pts
The elements of a C++ array created in a function are allocated on the stack.	
True	
○ False	

Question 19	1 / 1 pts





What is a common pointer error?
Assigning a new value to a pointer
O Using indirection on a pointer
O Setting a pointer value to nullptr
Using a pointer without first initializing it
O Dereferencing a pointer

Question 20	1 / 1 pts
What does the array <i>a</i> contain after this runs?	
<pre>int a[] = {1, 2, 3}; int b[] = {4, 5, 6}; a = b;</pre>	
O {4, 5, 6}	
Syntax error; does not compile.	
O {1, 2, 3}	
Undefined behavior	

Question 21	1 / 1 pts
What is printed when you run this code?	
<pre>int *n{nullptr}; cout &lt;&lt; *n &lt;&lt; endl;</pre>	
O No output; compiler error.	
No compilation errors, but undefined behavior	
O The word "nullptr"	
○ The address value 0	

Question 22	1 / 1 pts
Which array definition is illegal?	
<pre>const int SIZE = 3; int a1[SIZE]; int a2[3]; int a3[3]{}; int a4[] = {1, 2, 3}; int a5[2] = {1, 2, 3};</pre>	
O a2	
O None of these	
O a3	
O a1	
<ul><li>a5</li></ul>	

Question 23	1 / 1 pts
Explicitly initializing an array like this: $int \ a[] = \{1, 2, 3\}$ ; works in all versions of C++.	
● True	
○ False	

Question 24	1 / 1 pts
Which area of memory is your program code stored in?	
O Initialized Data	
O Неар	

Text			
○ Stack			
O Uninitialized Data			

Question 25	1 / 1 pts
In C++ initializing an array with the contents of another is illegal.	
True	
○ False	

