Q-08

Take the Quiz Again

Attempt History

	Attempt	Time	Score
KEPT	**Attempt 6**	18 minutes	15.5 out of 16
LATEST	**Attempt 6**	18 minutes	15.5 out of 16
	Attempt 5	15 minutes	13 out of 16
	Attempt 4	29 minutes	13.5 out of 16
	Attempt 3	18 minutes	15.5 out of 16
	Attempt 2	18 minutes	12 out of 16
	Attempt 1	27 minutes	12 out of 16

▶

⚠ Correct answers are hidden.

Submitted Jun 28 at 11:36pm

Question 1   2 / 2 pts

Match each item with the correct statement below.

File containing the declarations or prototypes   [interface ⌄]

Program which uses the functions in a library.   [client ⌄]

File containing the function definitions   [implementation ⌄]

File which contains instructions for building your program   [makefile ⌄]

Question 2   1 / 1 pts

In a client file you should compare your function's value to the _____?

- ○ checked value
- ◉ expected value
- ○ actual value
- ○ None of these

Question 3   1 / 1 pts

In a library, the *interface* file:

- ○ consists of function definitions
- ◉ consists of declarations or prototypes
- ○ consists of instructions that produce the executable
- ○ None of these

○ consists of function calls

Question 4   1 / 1 pts

What kind of error is this?

```
~/workspace/ $ ./ex1
The Patriots won the 2018 Super Bowl
```

● None of these

○ Type error (wrong initialization or assignment)

○ Operating system signal or trap

○ Linker error (something is missing when linking)

○ Compiler error (something is missing when compiling)

○ Runtime error (throws exception when running)

○ Syntax error (mistake in grammar)

Question 5   1 / 1 pts

What kind of error is this?

```
ex1.cpp:7:9: warning: missing terminating '"' character
    a = "hello world';
        ^
ex1.cpp:7:9: error: expected expression
```

○ Runtime error (throws exception when running)

● Syntax error (mistake in grammar)

○ Linker error (something is missing when linking)

○ Type error (wrong initialization or assignment)

○ None of these

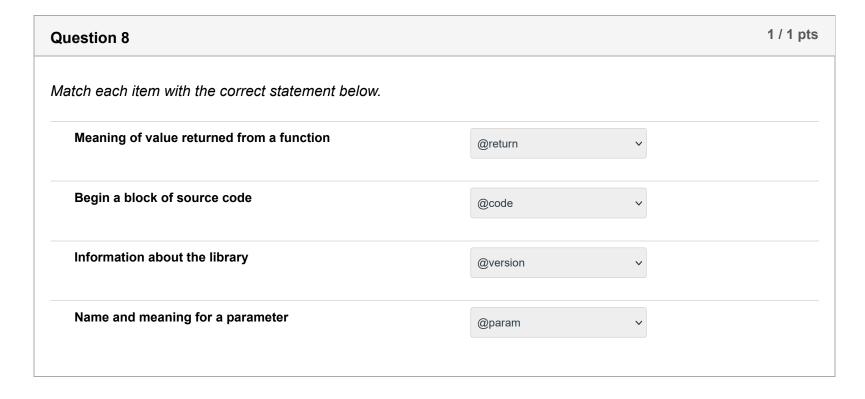○ Compiler error (something is missing when compiling)

○ Operating system signal or trap

Question 6   1 / 1 pts

Which line in the function "skeleton" below contains an error?

```
#include "borgia.h"        // 1.
void primoTiara(int n)     // 2.
{                          // 3.
    return 0;              // 4.
}                          // 5.
```

○ None of these

○ // 2.

○ // 5.

○ // 1.

○ // 4.

○ // 3.

Question 7

1 / 1 pts

Which prototypes in the following header file contain errors?

```
#ifndef EXAMPLE_H
#define EXAMPLE_H
#include <string>

std::string f1(int a);
int f2(double);
void f3(std::string& s, int n);
double f4();

#endif
```

☐ f4

☐ f3

☑ None of these

☐ f1

☐ f2

Question 8

1 / 1 pts

Match each item with the correct statement below.

Meaning of value returned from a function	@return ⌄
Begin a block of source code	@code ⌄
Information about the library	@version ⌄
Name and meaning for a parameter	@param ⌄

Question 9

1 / 1 pts

What is the output of the following?

```
int i = 1;
while (i < 20)
{
    cout << i << " ";
    i = i + 2;
    if (i == 15)
    {
        i = 19;
    }
}
```

○ 1 3 5 7 9 11 13 15 17

○ 1 3 5 7 9 11 13 15 17 19

○ 1 3 5 7 9 11 13 19

○ 1 3 5 7 9 11 13 17 19

Question 10
1 / 1 pts

Here is an implementation of `codeForDigit()` from H07. What is its problem?

```cpp
string codeForDigit(int digit) {
    switch (digit) {
        case 0: return "||:::";
        case 1: return ":::||";
        case 2: return "::|:|";
        case 3: return "::||:";
        case 4: return ":|::|";
        case 5: return ":|:|:";
        case 6: return ":||::";
        case 7: return "|:::|";
        case 8: return "|::|:";
        case 9: return "|:|::";
    }
    return "";
}
```

○ It gives the wrong output since you need `case '0':`, **not** `case 0:`

◉ It compiles and produces the correct output

○ It does not compile because you can't use `digit` as a `switch` selector

○ It does not compile since you can have only one `return` statement in a function

○ It does not compile since it has an extra `return` statement at the end

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Partial

Question 11
0.5 / 1 pts

In H07, one task is to write **stubs** for each of the functions in the library. Below is an attempt to do that. What is the problem?

```cpp
std::string barCode(int zip); { return ""; }
std::string codeForDigit(int digit); { return ""; }
int checkDigit(int zip); { return ""; }
```

☐ the braces are formatted incorrectly

☐ you are returning the wrong type from some functions

☐ the wrong values are being returned

☑ you have not removed the semicolons from the prototypes

☐ There is nothing wrong with the stubs. They are fine

☐ you have not removed the `std::` from the prototypes

Question 12
1 / 1 pts

Here is an implementation of `checkDigit()` from H07. What is its problem?

```
int checkDigit(int zip) {
    int sum = 0;
    while (zip != 0) {
        sum += zip % 10;
        zip /= 10;
    }
    if (sum % 10 != 0)
        return 10 - sum % 10;
    return 0;
}
```

○ It does not compile because you are missing the `else`

◉ It compiles and produces the correct output in all cases

○ It produces the wrong output if `sum` is evenly divisible by `10`

○ It skips one digit since you should divide by `10` **before** adding to `sum` instead of after

○ It produces the wrong output when `sum` is not evenly divisible by `10`

Question 13   1 / 1 pts

In H08 you need to complete the `digit()` function. What should replace the blank line below?

```
string digit(int digit, const string& symbols)
{
    string one = symbols.substr(0, 1);
    string five = [                    ]
    string ten = symbols.substr(2, 1);
```

○ `symbols.substr(0, 2);`

◉ `symbols.substr(1, 1);`

○ `symbols.substr(1, 2);`

○ `symbols.substr(0, 1);`

○ None of these are correct

Question 14   1 / 1 pts

In H08 you need to complete the `digit()` function. What should replace the blank line below?

```
string digit(int digit, const string& symbols)
{
    string one = [                    ]
    string five = symbols.substr(1, 1);
    string ten = symbols.substr(2, 1);
```

○ `symbols.substr(1, 2);`

○ None of these are correct

○ `symbols.substr(1, 1);`

○ `symbols.substr(0, 2);`

◉ `symbols.substr(0, 1);`

In H08 you need to complete the `digit()` function. What should replace the blank line below?

```cpp
string digit(int digit, const string& symbols)
{
    string one = symbols.substr(0, 1);
    string five = symbols.substr(1, 1);
    string ten =
```

○ `symbols.substr(2, 1);`

○ None of these are correct

○ `symbols.substr(1, 2);`

○ `symbols.substr(0, 2);`

○ `symbols.substr(1, 1);`