Q-08

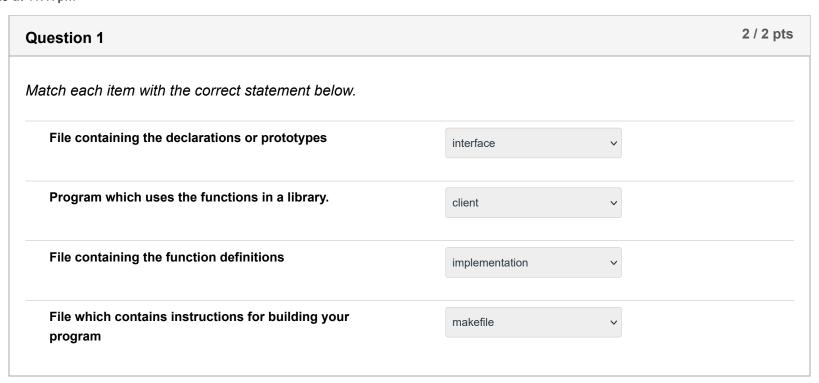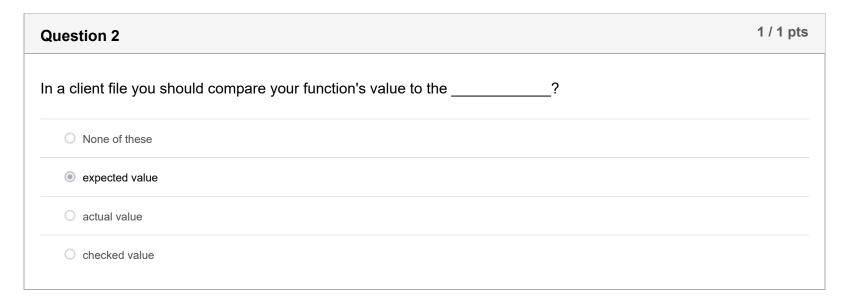| Due No due date	Points 16	Questions 15	Time Limit 30 Minutes	Allowed Attempts Unlimited

Attempt History

	Attempt	Time	Score
KEPT	Attempt 3	18 minutes	15.5 out of 16
LATEST	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 11:17pm

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 _____?

○ None of these

◉ expected value

○ actual value

○ checked value

Question 3
1 / 1 pts

In a library, the *makefile*:

○ consists of instructions that produce the executable

○ consists of function definitions

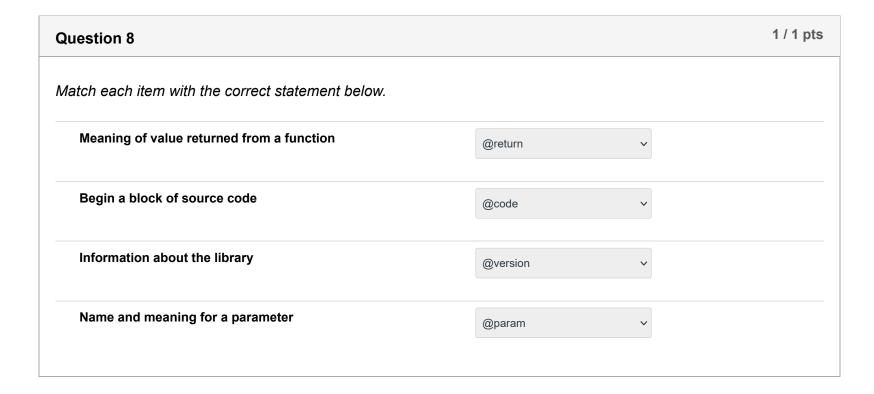○ consists of declarations or prototypes

○ consists of function calls

○ None of these

Question 4

1 / 1 pts

What kind of error is this?

`ex1.cpp:7: undefined reference to `f()'`

◉ Linker error (something is missing when linking)

○ None of these

○ Operating system signal or trap

○ Runtime error (throws exception when running)

○ Type error (wrong initialization or assignment)

○ Compiler error (something is missing when compiling)

○ 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)

○ Operating system signal or trap

○ None of these

○ Compiler error (something is missing when compiling)

◉ Syntax error (mistake in grammar)

○ Type error (wrong initialization or assignment)

○ Linker error (something is missing when linking)

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.
```

- ○ // 3.

- ○ None of these

- ○ // 5.

- ⦿ // 4.

- ○ // 2.

- ○ // 1.

Question 7
1 / 1 pts

Which of these are *dependencies*?

```
EXE=digit-tester
OBJS=client.o digits.o
$(EXE): $(OBJS)
    $(CXX) $(CXXFLAGS) $(OBJS) -o $(EXE)
```

- ☑ client.o

- ☑ digits.o

- ☐ None of these

- ☐ $(EXE)

- ☐ digit-tester

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;
int sum = 0;
while (i <= 13)
{
    sum = sum + i;
    i = i + 3;
}
cout << "The value of sum is " << sum;
```

- ○ The value of sum is 13

○ The value of sum is 35

○ The value of sum is 22

○ The value of sum is 0

Question 10

0 / 1 pts

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

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

☑ It compiles and produces the correct output

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

☐ If it does compile, it produces incorrect output because of the missing `break` statements

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

☐ It may not compile because it is missing a `break` on each line

Question 11

1 / 1 pts

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

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

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

◉ It compiles and produces the correct output

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

○ It does not compile because you can't have **two** statements following a `case` label

○ It compiles but always sets every result to "`|:|::`" (case 9)

Question 12   0 / 1 pts

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

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

☐ It compiles and produces the correct output in all cases

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

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

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

Question 13   0 / 1 pts

In H08, the `ones()`, `tens()` and `hundreds()` functions are already written. You need to complete the `digit()` function. Once you have completed it, what is the expected output for the code below?

```cpp
inline string ones(int n) { return digit(n, "IVX"); }
string digit(int digit, const string& symbols) { . . . }
cout << ones(9) << endl;
```

○ IX

○ XI

○ IVV

⦿ VIV

○ VIII

Question 14   1 / 1 pts

In H08, the `ones()`, `tens()` and `hundreds()` functions are already written. You need to complete the `digit()` function. Once you have completed it, what is the expected output for the code below?

```cpp
inline string ones(int n) { return digit(n, "IVX"); }
string digit(int digit, const string& symbols) { . . . }
cout << ones(5) << endl;
```

○ X

○ IIIII

○ I

◉ V

○ VX

Question 15

In H08, the ones(), tens() and hundreds() functions are already written. You need to complete the digit() function. Once you have completed it, what is the expected output for the code below?

```
inline string tens(int n) { return digit(n, "XLC"); }
string digit(int digit, const string& symbols) { . . . }
cout << tens(7) << endl;
```

○ XXX

○ XXL

◉ LXX

○ CLL

○ LLC