Q1 Loops

1 Point

What is the output of this program, if the user input is 2?

```
#include <iostream>
#include <string>
using namespace std;
int main()
{
   string greeting = "Hello, ";
   int number = 0;
   int counter = 0;
   cout << "Please enter an integer: ";
   cin >> number;
   while(counter < number)
   {
      counter = counter + 1;
      cout << greeting;
   }
   cout << "Hello!";
}
```

- ○ greetings Hello!
- ○ greetings Hello, Hello!
- ◉ Hello, Hello, Hello!
- ○ Hello, Hello!

Q1 Loops

1 Point

The type of a variable is ...

- ○ where in memory the variable is stored.
- ○ the value that is currently stored in the variable.
- ◉ the set of all values for this variable
- ○ from where in the program the variable is visible.

Q1

1 Point

A literal is all of these except:

- ○ a specific value.
- ◉ type of variable.
- ○ of floating point type, if it contains a "."
- ○ a construct, whose type is determined by its syntax.

Q1

1 Point

What is wrong with the following code snippet?

```
int price;
price = 9.42;
```

- ○ The price variable is never initialized
- ○ The data type for the price variable is not specified
- ◉ There is a type mismatch between price and 9.42
- ○ The price variable is never assigned a value

Q1

1 Point

Which one of the following is an assignment statement?

- `int a = 20;`
- `assign 20 to a;`
- `a = 20;`
- `assign a = 20;`

Q1

1 Point

What is the output of this program?

```
#include <iostream>
using namespace std;
int main()
{
   int x = 10;
   while (x > 0)
   {
     cout << x << " ";
     x = x + 3;
   }
}
```

- (●) 10 13 16 19 22 25 . . .
- ( ) 0 3 6 9 12 15 18 21 24
- ( ) The compiler will not compile because this has an infinite loop.
- ( ) This will compile and will run without any problems.

Q1

1 Point

The following function should sum all entered int values that are greater than 5, but it is incorrect. Find an error.

```
int main()
{
   int x, sum = 0;
   while (x < 10)
   {
      cin >> x;
      if (x > 5);
         sum = sum + x;
   }
   cout << "The sum of values > 5 is: " << sum << endl;
}
```

- ○ The while header needs a semicolon at the end of its line.
- ○ The semicolon at the end of the if statement is an error that the compiler should catch.
- ◉ The semicolon at the end of the if statement causes all entered values to be summed.
- ○ The statement: sum = sum + x; should instead say: sum == sum + x;

Q1

1 Point

Which of the following is the correct syntax for an if-else statement?

A

```
if (x < 10); {
   size = "Small";
}
else if (x < 20) {
   size = "Medium";
}
```

B

```
if (x < 10) {
   size = "Small";
}
else if (x < 20) {
   size = "Medium";
}
```

C

```
if (x < 10) {
   size = "Small";
}
else (x < 20) {
   size = "Medium";
}
```

D

```
if {
   size = "Small";
}
else if (x < 20) {
   size = "Medium";
}
```

- ○ A
- ◉ B
- ○ C
- ○ D