

COP 2535: Data Structures

Quiz 03

Instructions

Answer the following questions in writing. These are short answer questions. Upload your answers in Canvas as plain text. Please include your name in the text.

1. Assume the following:

```
int x = 5;
int y = 6;
int z = 8;
```

Do these expressions evaluate to true or false?

```
x == 5
7 <= (x + 2)
z > 4
(2 + x) != 7
z != 4
x >= 0
x <= (y * 2)
```

2. If the following expression does not evaluate to true, rewrite it so that it will return a true value:

```
#include <cmath>
(.6666667 * 6.0) == 4.0
```

3. What will this code print if `not_raining == false`?

```
if (not_raining)
    cout << "I will stay inside and study C++" << endl;
    cout << "I will take an umbrella if I go out." << endl;
cout << "I will go to the ball game." << endl;
```

4. Consider the following code.

```
int n;
cout << "Enter an integer: ";
cin >> n;
if (n > 0) {
    cout << "Zero    ";
    if (n > 10) {
```

```

        cout << "Ten    ";
        if (n > 20) {
            cout << "Twenty    ";
        }
    }
}

```

What will happen if the user enters:

```

5
15
30
-1

```

5. What is the difference between using a bare **if** statement, and using an **if/else** statement?
6. What does this mean? “The scope of a variable is limited to the block in which it is defined.”
7. What must you **include** in order to use character functions, such as **islower()** or **isalpha()**?
8. What is the optional, default **case** section?
9. What happens if you don’t include a **break** inside of a **case** clause?
10. List everything that is wrong with the following code.

```

Enum Pet = {"dog", "cat", "rabbit", "snake"}

```