

**CISS240: Introduction to Programming**  
**Quiz q1904**

Name: \_\_\_\_\_

Score: 

This is a closed-book, no C++ compiler, 2-minute quiz.

Q1. The following program does not run. Insert one statement to correct the problem.

```
#include <iostream>

// insert statement here

int main()
{
    std::cout << sum(5, 10, 1) << std::endl;
    return 0;
}

int sum(int start, int end, int step)
{
    int s = 0;
    for (int i = start; i <= end; i += step)
    {
        s += i;
    }
    return s;
}
```

Q2. The following program does not run. Insert one statement to correct the problem.

```
#include <iostream>

// insert statement here

int main()
{
    int i, j;
    std::cin >> i >> j;
    swap(i, j);
    std::cout << i << ' ' << j << '\n';
    return 0;
}

void swap(int & x, int & y)
{
    int t = x;
    x = y;
    y = t;
}
```

Q3. The function `play_audio()` plays an audio file. The parameters are:

- **filename**: a C-string that is the name of the audio file to be loaded.
- **track\_number**: an integer. 0 is the first track, 1 is the second track, etc.
- **repeat**: a boolean.

The function returns 0 if there are no errors, returns  $-1$  if the file cannot be found using the **filename**, and returns  $-2$  if the **track\_number** is not found. Write down the prototype of this function.

ANSWER:

Q4. The function `copy_array()` copies the values of an array to another. The parameters are:

- **x**: the target integer array.
- **x\_length**: an integer reference variable.
- **y**: the source integer array
- **y\_length**: an integer variable.

When you call `copy_array(x, x_length, y, y_length)` the values `y[0], ..., y[y_length - 1]` are copied to `x[0], ..., x[y_length - 1]` (respectively) and **x\_length** is set to **y\_length**. Write down the prototype of this function.

ANSWER:

Q5. What is a suitable prototype for `array_equals()` that compares the values of two

integer arrays `x` and `y` from returns `true` when `x[0],...,x[n - 1]` and `y[0],...,y[n - 1]` are the same (respectively), and `false` otherwise.

ANSWER: