

COMP 1603 – Tutorial/Lab 10

1. What is the output produced by the call `mystery(10)` of the following recursive function?

Show your working.

```
void mystery(int n){
    if (n > 5){
        mystery (n - 2);
        cout << n << "\t" << endl;
        mystery (n - 3);
        cout << n << "\t" << endl;
    }
}
```

2. Write a C++ program to implement a recursive function to print the integers between two positive integers a and b. Assume $a \leq b$.

3. What is the output produced by the call `fun(18, 5)` of the following recursive function?

Show your working.

```
void fun(int m, int n){
    if (n <= 0)
        cout << endl;
    else {
        fun(m - 2, n - 2);
        cout << m << " ";
        fun(m + 2, n - 2);
    }
}
```

4. What is the output produced by the call `mystery(11)` of the following recursive function?

Show your working.

```
void mystery(int n){
    if (n < 0)
        cout << "r ";
    else if (n > 4){
        mystery(n - 2);
        cout << "z ";
    } else {
        mystery(n - 4);
        cout << "i ";
    }
}
```