

CSC 212: Data Structures and Abstractions

Spring 2018

University of Rhode Island

Weekly Problem Set #2

Due Wednesday 2/14 before lab. Please turn in neat, and organized, answers hand-written on standard-sized paper **without any fringe**. At the top of each sheet you hand in, please write your name, and ID. The only library you're allowed to use in your answers is `iostream`.

1. Explain the difference between the following three declarations of a pointer.

```
const int* ptr;  
int* const ptr;  
const int* const ptr;
```

2. Assuming `y` is equal to 10, what is `x` equal to after this code: `int x = *(&y);`.
3. What is the minimum number of bits required to store `n` distinct code values?
4. Simplify the following expressions: $2^{\log_2 n}$,