

# CSE 333 Section 5

Thursday 26 April 2012

# Midterm Practice Problems

I. Grab a handout. Find all the bugs A bug includes:

- compiler errors and warnings
- memory leaks
- memory errors
- functionality problems
- bugs do not include style, but feel free to ask questions with regards to it.

# Midterm Practice Problems

## 2. Now we'll write some code

- same rules apply as your exercises
- try not to use your computer's man pages/google: you won't have it on your exam!

- Fill in this function definition:

```
int generalize_phone_numbers(char *area_code, char *city,  
    int city_length, int how_many,  
    char **numbers, char ***outputs);
```

- You can assume that outputs will be null
- I'll give you a main function (which you can assume does the right thing) and some sample output.
- There are multiple ways to do this. We'll talk about using character pointers AND using string functions

```
int generalize_phone_numbers(char *area_code, char *city,  
                             int city_length, int how_many,  
                             char **numbers, char ***outputs);
```

```
int main(int argc, char** argv){  
    char *area = "206";  
    char *city = "Seattle";  
    int count = 1;  
    char *numbers = "123-4567";  
    char **outputs;  
    // Append the area code to each phone number, with city in parens  
    int rc = generalize_phone_numbers(area, city, 7, count, &numbers,  
                                       &outputs);  
  
    ...  
    for(int i = 0; i < count; i++){  
        printf("%s\n", outputs[i]);  
    }  
    ...  
}
```

**output:**

206-123-4567 (Seattle)