CMSC 106 Worksheet   Fall 2017

Functions

1. Why do we want to write functions?

2. What is a parameter?

3. Write a function call print_rectangle that has three parameters: height, width, and a character. The function will print a rectangle with the specified dimensions using the specified character. The following is an example of calling the function you need to write:

   ```
   int main() {
       print_rectangle(3, 5, '*');
       printf("Another Rectangle\n");
       print_rectangle(4, 8, '$');

       return 0;
   }
   ```

   Output

   ```
   *****
   *****
   *****
   Another Rectangle
   $$$$$$$$
   $$$$$$$$
   $$$$$$$$
   $$$$$$$$
   ```

4. Wrie a function that takes two integer numbers as the parameters and return the max of the two. Add function calls from the main function and check if the return valus from the function are correct.

5. Wrie a function that takes three integer numbers as the parameters and return the max of the three. Add function calls from the main function and check if the return valus from the function are correct.

6. Write a function that displays the multiplication table based on the two integer parameters.

   ```
   int main() {
       print_mtable(3, 12);
       return 0;
   }
   ```

   Output

   ```
   3x1  = 3
   3x3  = 9
   3x4  = 12
   3x6  = 18
   3x7  = 21
   3x9  = 27
   3x10 = 30
   3x11 = 33
   3x12 = 36
   ```