

## Homework 4

Files to submit: **pascal.c**

Time it took Matthew to Complete: **20 mins**

- All programs must compile without warnings when using the -Wall and -Werror options
- Submit only the files requested
  - Do **NOT** submit folders or compressed files such as .zip, .rar, .tar, .targz, etc
- Your program must match the output exactly to receive credit.
  - Make sure that all prompts and output match mine exactly.
  - Easiest way to do this is to copy and paste them
- All input will be valid unless stated otherwise
- Print all real numbers to two decimal places unless otherwise stated
- The examples provided in the prompts do not represent all possible input you can receive.
- All inputs in the examples in the prompt are underlined
  - You don't have to make anything underlined it is just there to help you differentiate between what you are supposed to print and what is being given to your program
- If you have questions please post them on Piazza

### Restrictions

- No global variables are allowed
- Your main function may only declare variables, call other functions, and assign variables values.

For this problem you will be printing out Pascal's Triangle. If you have never heard of Pascal's Triangle recommend checking out its [Wikipedia Page](#).

### Assumptions and Requirements

- The maximum level that you will have to display is 28
- You should **NOT** use the combinations method for finding the value of an element because it will lead you to getting some wrong answers as the values generated through this method can become larger than the largest possible integer.
- You do not have to make your output appear as a triangle

### Hints

- The animation on the Wikipedia page is very helpful in figuring out how you should get started.

### Examples

1. Please enter how many levels of Pascal's Triangle you would like to see: 2  
1  
1 1
1. Please enter how many levels of Pascal's Triangle you would like to see: 4  
1  
1 1  
1 2 1  
1 3 3 1