CS2560.02 HW2

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# GitHub Repository

# Source Code

**#include** <stdio.h>

**int** **main**() {

**printf**("Restaurant Bill\n");

**printf**("----------------------------------------------------------------------------\n");

**float** bill = 88.67;

**float** tax\_mult = 0.0675;

**float** tip\_mult = 0.20;

**float** tax\_amount = tax\_mult \* bill;

**float** after\_tax = bill + tax\_amount;

**float** tip\_amount = tip\_mult \* after\_tax;

**float** total = tip\_amount + after\_tax;

**printf**("Meal Cost: %.2f\n", bill);

**printf**("Tax amount: %.2f\n", tax\_amount);

**printf**("Tip amount: %.2f\n", tip\_amount);

**printf**("Total amount: %.2f\n", total);

**printf**("\nOcean Levels\n");

**printf**("----------------------------------------------------------------------------\n");

**float** rise\_rate = 1.5;

**printf**("How much the ocean levels will rise in coming years:\n");

**printf**("5 years: %.1fmm\n", (rise\_rate \* 5));

**printf**("7 years: %.1fmm\n", (rise\_rate \* 7));

**printf**("10 years: %.1fmm\n", (rise\_rate \* 10));

**printf**("\nStock Trading Program\n");

**printf**("----------------------------------------------------------------------------\n");

**int** share\_count = 1000;

**float** share\_price = 45.50;

**float** commission\_mult = 0.02;

**float** sold\_price = 56.90;

**float** buy\_amount = share\_price \* share\_count;

**float** sell\_amount = sold\_price \* share\_count;

**float** buy\_commission = buy\_amount \* commission\_mult;

**float** sell\_commission = sell\_amount \* commission\_mult;

**printf**("Joe paid %.2f for his stock\n", buy\_amount);

**printf**("Joe paid %.2f in commission to buy the stock\n", buy\_commission);

**printf**("Joe sold the stock for %.2f\n", sell\_amount);

**printf**("Joe paid %.2f in commission to sell the stock\n", sell\_commission);

**printf**("Joe's profit after commission: %.2f\n", (sell\_amount - (buy\_amount + buy\_commission + sell\_commission)));

**printf**("\nPattern Displays\n");

**printf**("----------------------------------------------------------------------------\n");

**printf**("Pattern A\n");

**for** (**int** i = 0; i < 10; i++) {

**for** (**int** j = 0; j <= i; j++) {

**printf**("+");

}

**printf**("\n");

}

**printf**("\nPattern B\n");

**for** (**int** i = 10; i > 0; i--) {

**for** (**int** j = 0; j < i; j++) {

**printf**("+");

}

**printf**("\n");

}

}

# Screen Capture of Output

