

Question 1. Background. Not to be submitted.

Consider the following program. This program is incorrect. Correct this program and experiment with it. When you execute this program, it will ask you to enter a number. Type 4.56704 and press Enter. Experiment with other numbers as well.

```
#include<stdio.h>
int main() {
    float n;
    printf("Enter a floating point number:\n");
    scanf("%f", &n);
    printf("Hi! I am a floating point number.\n");
    printf("My value correct to 3 decimal places is %0.4f.\n",n);
    printf("My value correct to 1 decimal places is %0.2f.\n",n);
}
```

Question 2. Code to be submitted.

5 points for coding.

If you show your code to your lab instructor before the end of the lab, you get your coding score added to attendance.

100 attempts total.

A little bit of physics.

Ask the user to input initial velocity, time elapsed and acceleration as floating point numbers. Write a program to compute the distance travelled. Use the following formula.

$$distanceTravelled = initialVelocity \times timeElapsed + \frac{acceleration \times timeElapsed^2}{2}$$

Sample Program Execution:

```
Enter initial velocity:
2.222
Enter time elapsed:
3.333
Enter acceleration:
4.444
```

```
Initial velocity:      2.222000
Time elapsed:          3.333000
Acceleration:          4.444000
Distance travelled:    32.089874
```

Distance travelled correct to 2 decimal places is 32.09.