C-Kinematics

C-Kinematics is useful for any students in a basic physical science class. It's primary function, while originally for just leaning C, turned to a short labor-of-love for all students struggling with basic physics, not be condescending, but instead to help see the relationship between variables, and to calculate the variables to help just get the answer out of the way.

This program is NOT designed for academic dishonesty in any way, shape, or form! Any cases of such are not my fault, and should be dealt with by school or university faculty to any student(s) that use this program for such actions.

The Use of C-Kinematics

So, say you know a system that has A distance traveled of 234 meters, and a time taken to reach that distance of 10 seconds. The output would look something like this.

```
Physical Systems Solver for *EXTREMELY* Basic Classical Kinematic Systems
 GNU GPL v. 3, Copyright (c) Ian Mitchell 2017
-----------------------------------------------------

Enter Distance, Time, Mass, and Height in that order. Enter 0 if there is none.
234
10
0
0
Distance: x = 234.000000
Time: t = 10.000000
Mass: m = 0.000000
Height: h =
Velocity: v = 23.400000
Acceleration: a = 2.340000
Force: f = 0.000000
Momentum: p = 0.000000
Work: w = 0.000000
Power: po = 0.000000
Kinetic Energy: ke = 0.000000
Potential Energy: pe = 0.000000
```

Now, let's say we have a height and mass we need to account for in this system. Let's say a mass of 80 kilograms, and a height of 10 meters. It output given out would look something like this

```
Physical Systems Solver for *EXTREMELY* Basic Classical Kinematic Systems
 GNU GPL v. 3, Copyright (c) Ian Mitchell 2017
-----------------------------------------------------

Enter Distance, Time, Mass, and Height in that order. Enter 0 if there is none.
234
```

```
10
80
10
Distance: x = 234.000000
Time: t = 10.000000
Mass: m = 80.000000
Height: h =
Velocity: v = 23.400000
Acceleration: a = 2.340000
Force: f = 187.199997
Momentum: p = 1872.000000
Work: w = 43804.800781
Power: po = 4380.479980
Kinetic Energy: ke = 21902.400391
Potential Energy: pe = 7840.000000
```

As to reiterate from the second sentence, the program can dynamically calculate the parameters of physical systems based on variables given. While this is nothing new, this can help the average student in their homework (granted if work shown is not expected).