**Part D:**  Object height over time with a specific initial velocity.

**Use filename: projectile.cpp**

Write a program that creates a table that shows the height of a object launched straight up for each second from launch time (time zero) until the object reaches the ground (height less than or equal to zero). The height after ***t*** seconds is given by:

s = V0t - ½(g)(t2)

Where:

* 0 is the initial velocity in m/s
* g is the gravitational constant and has a  value of 9.8 m/s2
* **t** is the current time in seconds

The program should prompt the user for the launch velocity.

The program should generate a table that looks something like the following:

Enter Initial V0: **60**

Initial Velocity of Object: 60-m/s

Time Height

0   0

1   55.1

2   100.4

3   135.9

4   161.6

5   177.5

6   183.6

7   179.9

8   166.4

9   143.1

10  110

11  67.1

12  14.4

13  0

Total Time: 13-seconds

Maximum Height: 183.6 @ 6-seconds