Projectile

Problem Statement

The projectile is fired at an angle 30o with an initial velocity 100 m/s. Find
      1. Maximum height of the projectile.
      2. Horizontal distance covered by the projectile before
         reaching the ground.
       3. Time taken by the projectile to reach ground.

Input
Initial Velocity of the Ball ------   m/s
Firing Angle   ------   degrees

Control Buttons
"RUN" button starts the animation.
"STOP" button stops the animation.
"RESET" button resets the animation.

Procedure
Set initial velocity and firing angle of the ball. Press reset button and then start button to start the animation.

Concepts used
Basic definations of velocity and acceleration.
Horizontal and Verical components of velocity.
Newton's Laws of motion.

What to see

How firing angle affects the horizontal distance travelled by the ball?
Which parameter decides maximum hight reached by the ball?
For the same initial velocity at what firing angle ball will travel more distance?
What is the acceleration of the ball when it is in motion?
which parameter decides the velocity of the   ball when it strikes ground?