

Animation Assignment

1. Draw a ball in motion starting at the top of the window so that the center moves to the position it would move to under gravity in each step of the animation. The equation for the y-coordinate of the center is:
 $y=0.1*a*t**2+0.1$
where a is the acceleration of gravity, namely 9.81 m/sec², and t is the time in seconds. Choose an appropriate time scale to watch the motion: in real time, slow motion, and in time lapse motion. Save your program as ex_1_ball_gravity.py.

2. Use Python graphics to create an animated scene that includes

1. A realistic background
2. At least one moving composite object (i.e. an object made of more than one shape)
3. At least two objects moving at once.
4. At least one object that moves along a curved path, such as
 - a. a parabola
 - b. a wave
 - c. a circle
5. An object that appears or begins to move after another one has stopped.
(That means you'll need more than one for-loop)

Here are some themes you could use:

- Outer space
- Sports
- Roads with vehicles
- Under the sea
- Sky
- Video game re-enactment
- Alien invasion
- Volcanoes, tornados or other cataclysmic events
- Use your imagination!

All of your graphics must be made from Tkinter. Imported images are not permitted.

Save your program as ex_2_mygraphics.py.