Game Overview -

In Alien Invasion, the player controls a ship that appears at the bottom center of the screen. The player can move the ship right and left using the arrow keys and shoot bullets using the spacebar. When the game begins, a fleet of aliens fills the sky and moves across and down the screen. The player shoots and destroys the aliens. If the player shoots all the aliens, a new fleet appears that moves faster than the previous fleet. If any alien hits the player’s ship or reaches the bottom of the screen, the player loses a ship. If the player loses three ships, the game ends.

Software Requirements -

1. Set up the environment.
   1. Install Matplotlib (pg 306 of your textbook)
2. Download the provided files and familiarize yourself with them.
   * 1. [chapter\_15 (Generate Data).zip](https://nmsu.instructure.com/courses/1310497/files/163919712/download?wrap=1)
     2. [chapter\_16 (Download Data).zip](https://nmsu.instructure.com/courses/1310497/files/163919684/download?wrap=1)
     3. [chapter\_17 (Work with APIs).zip](https://nmsu.instructure.com/courses/1310497/files/163919716/download?wrap=1)
   1. Data Visualization Application
3. Create Random Walks
4. Expand the environment
   1. Install Plotly (pg 324 of your textbook)
5. Create Dice Rolling
6. Parse with CSV File Formats
7. Map Global Data Sets
8. Use a Web API
9. Visualize repositories using Plotly
10. Perform a preliminary test and ensure that the application works as intended by the author and tutorial.