

Combat Phase:

When there are only two individuals left on *dailyPlanetStreet* in *GothamLikeAdventureTown* (the *SuperHero* & *SuperVillain*), then the *SuperHero* will battle *SuperVillain* in a duel until the *hitPoints* [think health points] variable for one or both *SuperCitizens* is reduced to zero!

In a loop:

1. Randomly decide who will take the first swing (the attacker).
2. You will compare a random number chosen from *maxDamage* for the attacker to a random number chosen from the *defenseAbility* of the defender [note that *maxDamage* and *defenseAbility* most likely will vary depending on the characteristics of your *People*, as it would in any combat game/simulation].
 - a. If the damage value was greater than or equal to the defender's *defenseAbility* value, you will subtract the value of the damage from the defender's *hitPoints* total.
 - b. If the *defenseAbility* value is higher than the *maxDamage* value, then no changes are made to the *hitPoints* total.

Example Logic:

Superman is attacking DocOc.

Given a scenario where Superman has a *maxDamage* amount of 10 and DocOc has a *defenseAbility* of 8.

The simulation would choose a random damage value from 1 to 10 (the upper bound is equal to the *maxDamage* amount for Superman) and a random defense value from 1 to 8 (the upper bound is equal to the *defenseAbility* of DocOc). Those random values will be compared and used to decide whether DocOc's *hitPoints* total needs to be reduced or not.

This simulation will continue until *SuperHero* or *SuperVillain* *hitPoints* are reduced to zero.

Bonus Dialog:

Increased dialog in simulation - Have an array of statements that will give the user a better idea of what is happening in the simulation.

