# Use Case: Play game

- 1. Player enters 0, 1 or 2 arguments to set the number of tanks, and game mode (optional). assume the first argument is an integer and as # of tanks, 2nd argument is of cheating and it should be case insensitive. If user enters 0 argument, default to N=5 tanks.
- 2. The program randomly places the tanks on a 10 x 10 grid board with all cells. If Player provide second argument indicating cheating, the tanks will be represented in the grid system as letters, otherwise they will be represented as '~'
- 3. System speaks prompt:
  - a. Enter your move:
- 4. Player enters a move in the form of <Letter><Number> and is told if it hits or misses.
- 5. The program shows player the remaining structural integrity of their fortress and a map of what is known about the game-board.
  - a. X indicates a tank is hit
  - b. '' (space) indicates a miss.
  - c. Player is shown how much damage is suffered for each enemy shot.
- 6. Continue step 3 and step 4 until either
  - a. User has destroyed all the tanks on the grid system or
  - b. User's fortress is destroyed by enemy tanks.
- 7. If user wins by destroyed all the tanks, system prints out "Congratulations, you win!". If user loses with fortress being destroyed, system prints out "You lost, better luck next time."

## Variation#1

- 1.1 In step 1, player enters invalid # of arguments.
- 1.2 The program prints "Please enter valid number of arguments".
- 1.3 System exits with failure

### Variation#2

- 2.1 In step 2, not all tanks specified in first argument can be placed on the board.
- 2.2 System exits with failure

#### Variation#3

- 3.1 In step 4, player enters a invalid move.
- 3.2 The program prints "Invalid target. Please enter a coordinate such as D10".
- 3.3 Continue with step 3.

### Variation#4

- 4.1 In step 1, player enters invalid type of arguments.
- 4.2 The program crashes