Running Scenario

<u>Set up</u>

Several objects and one variable need to be created for the steps involved in running the scenario:
- New board game object is created.
- New Dungeon Area object is created with "Dungeon" being passed in as well.
- New Village Area object is created with "Village" being passed in as well.
- New Library Area object is created with "Library" being passed in as well.
- New Player Area object is created with "Batman" being passed in as well.
- New FightingEnemy Area object is created with "Joker" being passed in as well.
- New PuzzleEnemy Area object is created with "Riddler" being passed in as well.
- New GameEnemy Area object is created with "Bane" being passed in as well.
- I variable is created, being equal to the String value of "Paper".
- New Sword Item object is created with "Sword" being passed in as well.
- New Shield Item object is created with "Shield" being passed in as well.
- New Key Item object is created with "Key" being passed in as well.
- New HealthBoost Item object is created with "HealthBoost" being passed in as well.
- New SpecialItem Item object is created with "SpecialItem" being passed in as well.
- n variable is created, being equal to the int value of "5".

<u>Steps</u>

There are several steps that take place during the running of the game:
- Game board is printed.
  - Prints off the game board in the console.
- Players location is printed.
  - Initially set to {0,0}
- Players x position is changed.
  - X value is changed to 4.
- Players y position is changed.
  - Y value is changed to 2.
- Players position is changed
  - Method sets the players position using newly set x and y values. Then prints off new location. This being {4,2}
- Area at which player is in is retrieved.
  - Takes the two values of the players location and assigns them to x and y. these are then used to get the name of the area at which this correlate to in the game board.
  - In this case it's the Armoury.
- The trigger area method is run.
  - In this case, the Players health is too low which stops the Player from entering the Armoury.
- Players x position is changed.
  - X value is changed to 2.
- Players y position is changed.
  - Y value is changed to 1.
- Players position is changed

- ▪ Method sets the players position using newly set x and y values. Then prints off new location. This being {2,1}
- Area at which player is in is retrieved.
  - ▪ Takes the two values of the players location and assigns them to x and y. these are then used to get the name of the area at which this correlate to in the game board.
  - ▪ In this case it's the Village.
- The trigger area method is run.
  - ▪ In this case, the GameEnemy requires the Player to complete two games in order to enter the Village.
  - ▪ Player plays rock, paper and scissors and must match the game enemy's choice.
    - ▪ Player guesses correctly then moves onto next game.
  - ▪ Player place a dice rolling game where the player has to guess the dice roll of the GameEnemy.
    - ▪ Player guesses 5 and wins after some attempts.
- The inspect area method is run.
  - ▪ Player finds a HealthBoost item .
    - ▪ Item increases Players health to 110.
- Players x position is changed.
  - ▪ X value is changed to 3.
- Players y position is changed.
  - ▪ Y value is changed to 3.
- Players position is changed
  - ▪ Method sets the players position using newly set x and y values. Then prints off new location. This being {3,3}
- Area at which player is in is retrieved.
  - ▪ Takes the two values of the players location and assigns them to x and y. these are then used to get the name of the area at which this correlate to in the game board.
  - ▪ In this case it's the Storage Room.
- The trigger area method is run.
  - ▪ In this case, the Player requires a key to enter the Storage Room so is not allowed to enter.
- Players x position is changed.
  - ▪ X value is changed to 0.
- Players y position is changed.
  - ▪ Y value is changed to 4.
- Players position is changed
  - ▪ Method sets the players position using newly set x and y values. Then prints off new location. This being {0,4}
- Area at which player is in is retrieved.
  - ▪ Takes the two values of the players location and assigns them to x and y. these are then used to get the name of the area at which this correlate to in the game board.
  - ▪ In this case it's the Library.
- The trigger area method is run.
  - ▪ In this case, the PuzzleEnemy requires the Player to complete a puzzle in order to enter the Library.

- - Player has to guess the sum of 2 numbers.
    - Player guesses correct and enters the Library.
- The inspect area method is run.
  - Player finds a key.
  - Key is added to Players inventory.
- Players x position is changed.
  - X value is changed to 3.
- Players y position is changed.
  - Y value is changed to 3.
- Players position is changed
  - Method sets the players position using newly set x and y values. Then prints off new location. This being {3,3}
- Area at which player is in is retrieved.
  - Takes the two values of the players location and assigns them to x and y. these are then used to get the name of the area at which this correlate to in the game board.
  - In this case it's the Storage Room.
- The trigger area method is run.
  - Key is required to enter the Storage Room as before. Player has key in inventory and uses it to enter Storage Room.
- The inspect area method is run.
  - Player finds a Shield.
  - Shield is added to Players inventory.
- Players x position is changed.
  - X value is changed to 0.
- Players y position is changed.
  - Y value is changed to 0.
- Players position is changed
  - Method sets the players position using newly set x and y values. Then prints off new location. This being {0,0}
- Area at which player is in is retrieved.
  - Takes the two values of the players location and assigns them to x and y. these are then used to get the name of the area at which this correlate to in the game board.
  - In this case it's the Street.
- The trigger area method is run.
  - Nothing is required to enter the streets thus nothing happens.
- The inspect area method is run.
  - Player finds nothing in the Street.
- Players x position is changed.
  - X value is changed to 4.
- Players y position is changed.
  - Y value is changed to 2.
- Players position is changed
  - Method sets the players position using newly set x and y values. Then prints off new location. This being {4,2}
- Area at which player is in is retrieved.

- Takes the two values of the players location and assigns them to x and y. these are then used to get the name of the area at which this correlate to in the game board.
- In this case it's the Armoury.
- The trigger area method is run.
  - Players health is now above 70 so is able to enter room.
- The inspect area method is run.
  - Player finds a Sword.
  - Sword is added to Players inventory.
- The Print items collected method is run.
  - Prints off all items in Players inventory.
- Players x position is changed.
  - X value is changed to 1.
- Players y position is changed.
  - Y value is changed to 0
- Players position is changed
  - Method sets the players position using newly set x and y values. Then prints off new location. This being {1,0}
- Area at which player is in is retrieved.
  - Takes the two values of the players location and assigns them to x and y. these are then used to get the name of the area at which this correlate to in the game board.
  - In this case it's the Dungeon.
- The trigger area method is run.
  - Player needs to beat FightingEnemy in a fight in order to enter the Dungeon.
    - Player wins fight and also loses health.
- The inspect area method is run.
  - Player finds a Special item.

Outcome

Once the player finds the SpecialItem item object, The game is terminated as this meets the termination criteria.