**MP Phase 2 - Test Cases**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Class** | **Method** | **#** | **Test Description** | **Data** | **Expected Output** | **Actual Output** | **Pass/**  **Fail** |
| **Game** | sortRankings | 1 | The list of players based on player value is unsorted. | Player 1: 5250  Player 2: 20  Player 3: 120  Player 4: 7360 | Method sorts the list of players in descending order. | Method sorts the list of players in descending order. | P |
| 2 | The list of players based on player value is in ascending order. | Player 1: 20  Player 2: 120  Player 3: 5250  Player 4: 7360 | Method sorts the list of players in descending order. | Method sorts the list of players in descending order. | P |
| 3 | The list of players based on player value is in descending order. | Player 1: 7360  Player 2: 5250  Player 3: 120  Player 4: 20 | The order of the list of players is retained. | The order of the list of players is retained. | P |
| disCard | 1 | Player lands on Chance Space and is given a card | Card: Double rent | The card is removed from the list of final cards and added to the list of used cards. | The card is removed from the list of final cards and added to the list of used cards. | P |
| 2 | Player does not land on Chance Space | Player position: 10  Chance Space position: 13 | No card is removed from the list of final cards or added to the list of used cards. | No card is removed from the list of final cards or added to the list of used cards. | P |
| 3 | Player lands on Chance Space, is given a card and decides to immediately use it | Card: Double rent | The card is removed from the list of final cards and added to the list of used cards. | The card is removed from the list of final cards and added to the list of used cards. | P |
| generateAllCards | 1 | The game starts | List size of final cards: 28 | Cards are instantiated/made depending in the total card count per group, added to the list of final cards, and shuffled. | Cards are instantiated/made depending in the total card count per group, added to the list of final cards, and shuffled. | P |
| 2 | The game is in progress | List size of final cards: 15 | Nothing. | Nothing. | P |
| 3 | The game ends | List size of final cards: 0 | Nothing. | Nothing. | P |
| isOver | 1 | Player does not have enough money to pay rent and becomes bankrupt | Player cash: 1000  Rent amount: 1100  isBankrupt (Player): true | Method returns true. | Method returns true. | P |
| 2 | Bank runs out of cash after Player collects money from used Chance card | Bank cash: -150  Amount required by Card: 200  isBankrupt (Bank): true | Method returns true. | Method returns true. | P |
| 3 | Player owns two full sets of properties with the same color | Owned gray properties: 2  Owned pink properties: 3  ownsTwoColors (Player): true | Method returns true. | Method returns true. | P |
| 4 | Player and Bank have enough cash | Player cash: 750  Bank cash: 5200 | Method returns false. | Method returns false. | P |
| shuffleCards | 1 | All Chance cards are generated at the start of the game | List of final cards: complete (28/28) | The final cards are shuffled. | The final cards are shuffled. | P |
| 2 | Cards are added to the list of used cards | List of final cards:  15/28  List of used cards:  13 | Both final cards and used cards are shuffled. | Both final cards and used cards are shuffled. | P |
| 3 | No final cards left, and all is in the list of used cards | List of final cards:  0/28  List of used cards:  28 | The used cards are shuffled. | The used cards are shuffled. | P |
| setBankMoney | 1 | The game starts with three players | Number of Players: 3 | Bank money is computed and set. | Bank money is computed and set. | P |
| 2 | The game is in progress | Number of Players: 3 | Bank money is not computed and set. | Bank money is not computed and set. | P |
| 3 | The game ends | Number of Players: 3 | Bank money is not computed and set. | Bank money is not computed and set. | P |
| setCurrPlayer | 1 | The game starts with Player 1 | Current player: Player 1 | Player 1 is set as the current player. | Player 1 is set as the current player. | P |
| 2 | It is still Player 1’s turn | Current player: Player 1 | Player 1 is still set as the current player. | Player 1 is still set as the current player. | P |
| 3 | It is not the turn of Player 1 | Current player: Player 1 | Player 1 is not set as the current player. | Player 1 is not set as the current player. | P |
| setCurrTile | 1 | Player lands on Start tile | Dice value: 4  Current Player position: 28  Start tile position: 0 | Current tile position of the player is set to zero. | Current tile position of the player is set to zero. | P |
| 2 | Player lands on a property | Dice value: 2  Current Player position: 28  Property tile position: 30 | Current tile position of the player is set same with the position of the property tile. | Current tile position of the player is set same with the position of the property tile. | P |
| 3 | Player passes Start tile | Dice value: 6  Current Player position: 28  Start tile position: 0 | Current tile position of the player is set same with the position of some tile past Start. | Current tile position of the player is set same with the position of some tile past Start. | P |
| setTurn | 1 | The game starts with Player 1 | Number of Players: 4  Current player: Player 1 | Player 1 is set as the current player. | Player 1 is set as the current player. | P |
| 2 | The turn of the second to the last player ends | Number of Players: 4  Current player: Player 3 | Player 3 is still set as the current player. | Player 3 is still set as the current player. | P |
| 3 | The last player’s turn ends | Number of Players: 4  Current player: Player 4 | Player 1 is set back as the current player. | Player 1 is set back as the current player. | P |
| **Player** | rollDice | 1 | Player randomly rolls the dice within 1 to 6 | dice: 5 | The dice gets the random value (5) which is within the range of 1 to 6 and returns 5. | The dice gets the random value (5) which is within the range of 1 to 6 and returns 5. | P |
| 2 | Player tries to roll dice not within 1 to 6 | dice: 2 | The dice gets the random value (2) which is within the range of 1 to 6 and returns 5. | The dice gets the random value (2) which is within the range of 1 to 6 and returns 5. | P |
| 3 | Player tries to roll a negative value | dice: 3 | The dice gets the random value (3) which is within the range of 1 to 6 and returns 5. | The dice gets the random value (3) which is within the range of 1 to 6 and returns 5. | P |
| move | 1 | Player moves until before the Start tile (at index 0) | nDice: 5  currTile: 13  hasPassed: false | Current tile position of the Player becomes 18, hasPassed (checking if Player lands or passes Start) remains false. Player does not collect Start cash of 200. | Current tile position of the Player becomes 18, hasPassed (checking if Player lands or passes Start) remains false. Player does not collect Start cash of 200. | P |
| 2 | Player moves past the Start tile | nDice: 6  currTile: 28  hasPassed: true | Current tile position of the Player becomes 2, hasPassed (passes Start) is set to true. Player collects Start cash of 200. | Current tile position of the Player becomes 2, hasPassed (passes Start) is set to true. Player collects Start cash of 200. | P |
| 3 | Player lands exactly at Start | nDice: 3  currTile: 29  hasPassed: true | Current tile position of the Player becomes 0, hasPassed (lands on Start) is set to true. Player collects Start cash of 200. | Current tile position of the Player becomes 0, hasPassed (lands on Start) is set to true. Player collects Start cash of 200. | P |
| isBankrupt | 1 | Player still has cash after purchasing a property | Property: Connecticut  Property price: 200  Cash: 1500 | Method returns false and game continues. | Method returns false and game continues. | P |
| 2 | Player has exactly no cash after paying rent | Property: Connecticut  Rent: 400  Cash: 400 | Method returns false and game continues. | Method returns false and game continues. | P |
| 3 | Player does not have enough cash to pay rent | Property: Connecticut  Rent: 600  Cash: 400 | Method returns true and game ends. | Method returns true and game ends. | P |
| ownsTwoColors | 1 | Player owns two full sets of properties with the same color. | Owned properties (blue): 3  Owned properties (orange): 2 | Method returns true. | Method returns true. | P |
| 2 | Player owns only one full set of properties with the same color. | Owned properties (blue): 3  Owned properties (orange): 1  Owned properties (yellow): 1 | Method returns false. | Method returns false. | P |
| 3 | Player does not own full set of properties with the same color. | Owned properties (blue): 2  Owned properties (orange): 1  Owned properties (yellow): 1 | Method returns false. | Method returns false. | P |
| purchase | 1 | Player has enough cash and property is unowned | Property: 5th Avenue  Property price: 320  Property owner: none  Player cash: 1350 | Player successfully adds property to list of owned properties and price is deducted from Player’s cash. | Player successfully adds property to list of owned properties and price is deducted from Player’s cash. | P |
| 2 | Player does not have enough cash | Property: 5th Avenue  Property price: 320  Property owner: none  Player cash: 300 | The “BUY” button in view is disabled. | The “BUY” button in view is disabled. | P |
| 3 | Property is already owned by another Player | Property: 5th Avenue  Property price: 320  Property owner: some Player  Player cash: 1500 | The “BUY” button in view is disabled. | The “BUY” button in view is disabled. | P |
| develop | 1 | Owner lands on his property, has enough cash, and rent collected is enough for development | Player type that is the owner object and his property object | Cost for development is deducted from owner’s cash on hand; number of houses is incremented to the property object | Cost for development is deducted from owner’s cash on hand; number of houses is incremented  to the property object | P |
| 2 | Owner lands on his property, has enough cash, but rent collected is not enough for development | Player type that is the player object and property object of another player | A notification that player is unable to develop his property appears; cash on hand is retained and number of houses is not incremented | A notification that player is unable to develop his property appears; cash on hand is retained and number of houses is not incremented | P |
| 3 | Owner does not land on his property, has enough cash, and rent collected is enough for development | Player type that is the owner object and his property object | Player’s cash on hand is retained and number of houses is not incremented | Player’s cash on hand is retained and number of houses is not incremented | P |
| payRent | 1 | Player has enough cash | Property: 5th Avenue  Rent: 1000  Cash: 1500 | Owner earns money from rent paid by the player. | Owner earns money from rent paid by the player. | P |
| 2 | Player does not have enough cash | Property: 5th Avenue  Rent: 1000  Cash: 950 | The game ends. | The game ends. | P |
| 3 | Player owns the property | Property: 5th Avenue  Rent: 1000  Cash: 950 | None will be added or deducted to the player and owner. | None will be added or deducted to the player and owner. | P |
| payTax | 1 | Player has enough cash | Tax type: Luxury  Tax amount: 75  Cash: 1250 | Bank earns money from tax paid by the player. | Bank earns money from tax paid by the player. | P |
| 2 | Player does not have enough cash | Tax type: Luxury  Tax amount: 75  Cash: 50 | The game ends. | The game ends. | P |
| 3 | Player has exact amount of cash | Tax type: Luxury  Tax amount: 75  Cash: 75 | Bank earns money from tax paid by the player and the game continues. | Bank earns money from tax paid by the player and the game continues. | P |
| compareTo | 1 | Player value is less than the value of another player | Player 1 value: 1500  Player 2 value: 5250 | Method returns false. | Method returns false. | P |
| 2 | Player value is greater than the value of another player | Player 1 value: 5250  Player 2 value: 1500 | Method returns false. | Method returns false. | P |
| 3 | Player value is the same with the value of another player | Player 1 value: 5250  Player 2 value: 5250 | Method returns true. | Method returns true. | P |
| computePlayerVal | 1 | Player has positive cash amount and has multiple developed properties | Cash: 1320  Owned properties:  Acacia – 750  Ylaya – 150  9th Street – 900 | Player value is computed and not set to zero. | Player value is computed and not set to zero. | P |
| 2 | Player has positive cash amount but only has a few undeveloped properties | Cash: 1350  Owned properties:  Acacia – 20  Ylaya – 10  9th Street – 26 | Player value is computed and not set to zero. | Player value is computed and not set to zero. | P |
| 3 | Player has 0 cash amount but has multiple fully developed properties | Cash: 0  Owned properties:  Acacia – 1100  Ylaya – 750  9th Street – 1275 | Player value is computed and not set to zero. | Player value is computed and not set to zero. | P |
| 4 | Player is bankrupt but has multiple fully developed properties | Cash: -250  Owned properties:  Acacia – 1100  Ylaya – 750  9th Street – 1275 | Player value is set to zero.  (will be marked as a Bankrupt player when displayed in the Game) | Player value is set to zero.  (will be marked as a Bankrupt player when displayed in the Game) | P |
| 5 | Player is bankrupt and only has few properties | Cash: -250  Owned properties:  Acacia – 100  Ylaya – 50  9th Street – 130 | Player value is set to zero.  (will be marked as a Bankrupt player when displayed in the Game) | Player value is set to zero.  (will be marked as a Bankrupt player when displayed in the Game) | P |
| useCard | 1 | Player lands on Chance Space and uses the chance card immediately | Stored card: Get out of Jail free | The card is discarded from Player’s list of stored cards and the action in the card is done. | The card is discarded from Player’s list of stored cards and the action in the card is done. | P |
| 2 | Player lands on Chance Space and decides to keep the chance card | Stored card: Get out of Jail free | The card is retained in Player’s list of stored cards no action in the card is done. | The card is retained in Player’s list of stored cards no action in the card is done. | P |
| 3 | Player lands on Chance Space and does nothing | Stored card: Get out of Jail free | The card is retained in Player’s list of stored cards no action in the card is done. | The card is retained in Player’s list of stored cards no action in the card is done. | P |
| storeCard | 1 | Player lands on Chance Space and uses the chance card immediately | Card: Get out of Jail free | The card is not added to the Player’s list of stored cards. | The card is not added to the Player’s list of stored cards. | P |
| 2 | Player lands on Chance Space and decides to keep the chance card | Card: Get out of Jail free | The card is added to the Player’s list of stored cards. | The card is added to the Player’s list of stored cards. | P |
| 3 | Player lands on Chance Space and does nothing | Card: Get out of Jail free | The card is still added to the Player’s list of stored cards. | The card is still added to the Player’s list of stored cards. | P |
| disCard | 1 | Player lands on Chance Space and uses the chance card immediately | Card: Get out of Jail free | The card is neither added nor removed from the Player’s list of stored cards. | The card is neither added nor removed from the Player’s list of stored cards. | P |
| 2 | Player lands on Chance Space and decides to keep the chance card | Card: Get out of Jail free | The card is not removed from the Player’s list of stored cards. | The card is not removed from the Player’s list of stored cards. | P |
| 3 | Player lands on Chance Space and does nothing | Card: Get out of Jail free | The card is not removed from the Player’s list of stored cards. | The card is not removed from the Player’s list of stored cards. | P |
| addCash | 1 | Some other player lands on the property owned by the Player | Cash: 1250  Property rent: 150 | Player earns from the rent paid by the other player. | Player earns from the rent paid by the other player. | P |
| 2 | Player uses Chance Card (Collect 150 prize money) | Cash: 350  Card: Collect 150 prize money | The prize money is added to the cash of the Player. | The prize money is added to the cash of the Player. | P |
| 3 | Player passes Start tile | Cash: 1250 | An amount of 200 is collected by the Player. | An amount of 200 is collected by the Player. | P |
| deductCash | 1 | Player has enough cash and purchases property | Cash: 1250  Property price: 200 | Cash is deducted from player. | Cash is deducted from player. | P |
| 2 | Player has enough cash and pays rent | Cash: 1250  Property rent: 200 | Cash is deducted from player. | Cash is deducted from player. | P |
| 3 | Player does not enough cash and pays rent | Cash: 1250  Development cost: 100 | Cash is deducted from player. | Cash is deducted from player. | P |
| setCurrTile | 1 | Player lands on Start tile | Dice value: 4  Current Player position: 28  Start tile position: 0 | Current tile position of the player is set to zero. | Current tile position of the player is set to zero. | P |
| 2 | Player lands on a property | Dice value: 2  Current Player position: 28  Property tile position: 30 | Current tile position of the player is set same with the position of the property tile. | Current tile position of the player is set same with the position of the property tile. | P |
| 3 | Player passes Start tile | Dice value: 6  Current Player position: 28  Start tile position: 0 | Current tile position of the player is set same with the position of some tile past Start. | Current tile position of the player is set same with the position of some tile past Start. | P |
| setHasPassed | 1 | Player lands on Start tile | Dice value: 4  Current Player position: 28  Start tile position: 0 | The hasPassed attribute of the Player is set to true. | The hasPassed attribute of the Player is set to true. | P |
| 2 | Player lands on some tile but neither lands nor passes Start | Dice value: 1  Current Player position: 28  Start tile position: 0 | The hasPassed attribute of the Player is still set to false. | The hasPassed attribute of the Player is still set to false. | P |
| 3 | Player passes Start tile | Dice value: 6  Current Player position: 28  Start tile position: 0 | The hasPassed attribute of the Player is set to true. | The hasPassed attribute of the Player is set to true. | P |
| setInJail | 1 | Player lands on Jail tile | Dice value: 4  Current Player position: 13  Jail tile position: 17 | The inJail attribute of the Player is set to true. | The inJail attribute of the Player is set to true. | P |
| 2 | Player passes Jail tile | Dice value: 6  Current Player position: 13  Jail tile position: 17 | The inJail attribute of the Player is still set to false. | The inJail attribute of the Player is still set to false. | P |
| 3 | Player receives the Chance Card go to Jail | Dice value: 2  Current Player position: 11  Chance Space position: 13  Jail tile position: 17 | The inJail attribute of the Player is set to true. | The inJail attribute of the Player is set to true. | P |
| setPlayerVal | 1 | Player has positive cash amount | Cash: 1750 | Player value attribute is set to the compute value from compute rankings method. | Player value attribute is set to the compute value from compute rankings method. | P |
| 2 | Player has zero cash amount | Cash: 0 | Player value attribute is set to the compute value from compute rankings method. | Player value attribute is set to the compute value from compute rankings method. | P |
| 3 | Player has negative cash amount | Cash: -50 | Player value attribute is set to zero. | Player value attribute is set to zero. | P |
| **Board** | addTile | 1 | The name matches with the list of Property names in the condition of the method | String name: “Almond Drive” | The property object is instantiated and added to the arraylist of tiles. | The property object is instantiated and added to the arraylist of tiles. | P |
| 2 | The name matches with the list of Fixed Space names in the condition of the method | String name: “Community Service” | The fixed space object is instantiated and added to the arraylist of tiles. | The fixed space object is instantiated and added to the arraylist of tiles. | P |
| 3 | The name matches with the list of Railroad names in the condition of the method | String name: “Metro” | The railroad object is instantiated and added to the arraylist of tiles. | The railroad object is instantiated and added to the arraylist of tiles. | P |
| **Bank** | addCash | 1 | Player lands on Luxury Tax | Player cash: 1250  Bank cash: 5200  Tax amount: 75 | The tax amount is added to the Bank’s cash. | The tax amount is added to the Bank’s cash. | P |
| 2 | Player decides to develop a property | Player cash: 1250  Bank cash: 5200  Development cost: 270 | The development cost is added to the Bank’s cash. | The development cost is added to the Bank’s cash. | P |
| 3 | Player uses Chance Card (Renovation) | Player cash: 1250  Bank cash: 5200  Renovation cost: 50 | The renovation cost is added to the Bank’s cash. | The renovation cost is added to the Bank’s cash. | P |
| deductCash | 1 | Player passes through Start | Player cash: 1250  Bank cash: 5200 | An amount of 200 is deducted from the Bank’s cash. | An amount of 200 is deducted from the Bank’s cash. | P |
| 2 | Player lands on Start | Player cash: 1250  Bank cash: 5200 | An amount of 200 is deducted from the Bank’s cash. | An amount of 200 is deducted from the Bank’s cash. | P |
| 3 | Player pays rent to another player | Player cash: 1250  Bank cash: 5200 | No amount is deducted from the Bank’s cash. | No amount is deducted from the Bank’s cash. | P |
| setCurrAmount | 1 | Player decides to develop a property | Player cash: 1250  Bank cash: 5200  Development cost: 270 | The bank cash is updated with the added development cost. | The bank cash is updated with the added development cost. | P |
| 2 | Player passes through Start | Player cash: 1250  Bank cash: 5200 | The bank cash is updated with the deducted amount of 200 from Start. | The bank cash is updated with the deducted amount of 200 from Start. | P |
| 3 | Player pays rent to another player | Player cash: 1250  Bank cash: 5200 | No amount is updated from the Bank’s cash. | No amount is updated from the Bank’s cash. | P |
| ***FixedSpace*** | landAction  **(Start)** | 1 | Player passes through Start | Player cash: 1250  Bank cash: 5200 | Player collects an amount of 200 and the same amount is deducted from the Bank. | Player collects an amount of 200 and the same amount is deducted from the Bank. | P |
| 2 | Player lands on Start | Player cash: 1250  Bank cash: 5200 | Player collects an amount of 200 and the same amount is deducted from the Bank. | Player collects an amount of 200 and the same amount is deducted from the Bank. | P |
| 3 | Player lands on Start but Bank does not have enough money | Player cash: 720  Bank cash: 150 | Player collects the remaining amount of cash the Bank has and the game ends. | Player collects the remaining amount of cash the Bank has and the game ends. | P |
| landAction **(Community Service)** | 1 | Player passes through Community Service | Player cash: 1250  Bank cash: 5200 | Nothing happens. | Nothing happens. | P |
| 2 | Player lands on Community Service | Player cash: 1250  Bank cash: 5200 | Player collects an amount of 50 and the same amount is deducted from the Bank. | Player collects an amount of 50 and the same amount is deducted from the Bank. | P |
| 3 | Player lands on a property before Community Service. | Player cash: 1250  Bank cash: 5200 | Nothing happens. | Nothing happens. | P |
| landAction  **(Free Parking)** | 1 | Player passes through Free Parking | Player cash: 1250  Bank cash: 5200 | Player waits for his next turn. | Player waits for his next turn. | P |
| 2 | Player lands on Free Parking | Player cash: 1250  Bank cash: 5200 | Player waits for his next turn. | Player waits for his next turn. | P |
| 3 | Player lands on a property before Free Parking | Player cash: 1250  Bank cash: 5200 | Player waits for his next turn. | Player waits for his next turn. | P |
| landAction  **(Jail)** | 1 | Player passes through Jail | Player cash: 1250  Bank cash: 5200  inJail: false | Nothing happens. | Nothing happens. | P |
| 2 | Player lands on Jail | Player cash: 1250  Bank cash: 5200  inJail: true | Player’s turn ends and attribute inJail is set to true. | Player’s turn ends and attribute inJail is set to true. | P |
| 3 | It is Player’s next turn and is still in Jail | Player cash: 1250  Bank cash: 5200 | Player pays 50 and this amount is added to Bank before beginning next turn. | Player pays 50 and this amount is added to Bank before beginning next turn. | P |
| **Tax** | computeTax **(Luxury)** | 1 | Player passes through Luxury Tax | Player cash: 1250  Bank cash: 5200 | Tax is not computed. | Tax is not computed. | P |
| 2 | Player lands on Luxury Tax | Player cash: 1250  Bank cash: 5200 | Tax amount of 75 is computed and returned by the method. | Tax amount of 75 is computed and returned by the method. | P |  |  |  |  |
| 3 | Player lands on a Property before Luxury Tax | Player cash: 1250  Bank cash: 5200 | Tax is not computed. | Tax is not computed. | P |  |  |  |  |
| computeTax **(Income)** | 1 | Player passes through Income Tax | Player cash: 1250  Bank cash: 5200 | Tax is not computed. | Tax is not computed. | P |  |  |  |  |
| 2 | Player lands on Income Tax | Player cash: 1250  Bank cash: 5200 | Tax amount of 200 is computed and returned by the method. | Tax amount of 200 is computed and returned by the method. | P |
| 3 | Player lands on a Property before Income Tax | Player cash: 1250  Bank cash: 5200 | Tax is not computed. | Tax is not computed. | P |
| **< Ownable >** | setIsOwned | 1 | Player purchases property | Property: 5th Avenue  Owner: none | The isOwned attribute of the Player is set to true. | The isOwned attribute of the Player is set to true. | P |
| 2 | Player successfully makes trade | Property: 5th Avenue  Owner: Player 1  Property: Almond Drive  Owner: Player 2 | The isOwned attribute of the Player is still set to true. | The isOwned attribute of the Player is still set to true. | P |
| 3 | Player uses Chance card to land on unowned property but decides not to purchase it | Card: Proceed to Property  Property: 5th Avenue  Owner: none | The isOwned attribute of the Player is remains false. | The isOwned attribute of the Player is remains false. | P |
| setOwner | 1 | Player purchases property | Property: 5th Avenue  Owner: none | The player is set as the owner. | The player is set as the owner. | P |
| 2 | Player successfully makes trade | Property: 5th Avenue  Owner: Player 1  Property: Almond Drive  Owner: Player 2 | The player is set as the owner and vice versa. | The player is set as the owner and vice versa. | P |
| 3 | Player uses Chance card to land on unowned property but decides not to purchase it | Card: Proceed to Property  Property: 5th Avenue  Owner: none | The player is not set as the owner and property remains unowned. | The player is not set as the owner and property remains unowned. | P |
| setPrice | 1 | Property object is made at the start of the game | Property: 5th Avenue | The corresponding fixed price is set. | The corresponding fixed price is set. | P |
| 2 | Railroad object is made at the start of the game | Railroad: South | The corresponding fixed price is set. | The corresponding fixed price is set. | P |
| 3 | Utility object is made at the start of the game | Utility: Electric | The corresponding fixed price is set. | The corresponding fixed price is set. | P |
| **Property** | computeRent | 1 | Player lands on his own property | Property: Almond Drive  Owner: Player 1 | Rent is not computed. | Rent is not computed. | P |
| 2 | Player lands on unowned property | Property: Almond Drive  Owner: none | Rent is not computed. | Rent is not computed. | P |
| 3 | Player lands on an owned property | Property: Almond Drive  Owner: Player 3 | Rent is computed. | Rent is computed. | P |
| setDoubleRent | 1 | Player uses the double rent Chance Card | Card: Apply double rent  Property: 5th Avenue | The doubleRent attribute is set to true. | The doubleRent attribute is set to true. | P |
| 2 | Some other player lands on the Property with double rent applied | Card: Apply double rent  Property: 5th Avenue | The doubleRent attribute is still set to true. | The doubleRent attribute is still set to true. | P |
| 3 | The player that landed on the Property with double rent applied has paid the rent | Card: Apply double rent  Property: 5th Avenue | The doubleRent attribute is set back to false. | The doubleRent attribute is set back to false. | P |
| setFootCount | 1 | Player lands on an unowned property | Property: Almond Drive  Owner: none | The foot count is not incremented. | The foot count is not incremented. | P |
| 2 | Player lands on his own property | Property: Almond Drive  Owner: Player 1 | The foot count is incremented. | The foot count is incremented. | P |
| 3 | Player lands on a property of another player | Property: Almond Drive  Owner: Player 3 | The foot count is incremented. | The foot count is incremented. | P |
| setFootTrafficLimit | 1 | A property object is instantiated | Property: 5th Avenue  Number of Players: 2 | Foot traffic is computed based on the number of players and is set. | Foot traffic is computed based on the number of players and is set. | P |
| 2 | A property object is not instantiated | Number of Players: 2 | Foot traffic is not computed. | Foot traffic is not computed. | P |
| 3 | A different kind of tile object is instantiated | Tile: Chance Space  Number of Players: 2 | Foot traffic is not computed. | Foot traffic is not computed. | P |
| setIsFullyDeveloped | 1 | Player lands on own property but does not have enough cash to develop | Number of houses: 2 | The attribute isFullyDeveloped remains false. | The attribute isFullyDeveloped remains false. | P |
| 2 | Player has fully developed his own property | Number of houses: 4 | The attribute isFullyDeveloped is set to true. | The attribute isFullyDeveloped is set to true. | P |
| 3 | Player lands on a property of another player | Number of houses: 5 | The attribute isFullyDeveloped remains true. | The attribute isFullyDeveloped remains true. | P |
| setNumHouses | 1 | Player successfully develops own property | Number of houses: 3 | The number of houses is incremented. | The number of houses is incremented. | P |
| 2 | Player fully develops own property | Number of houses: 4 | The number of houses is incremented. | The number of houses is incremented. | P |
| 3 | Player has already developed the property until Hotel | Number of houses: 5 | The number of houses is not incremented. | The number of houses is not incremented. | P |
| setRent | 1 | Player successfully develops own property | Number of houses: 3  Property type: Green | Rent is set based the number of houses and the property color. | Rent is set based the number of houses and the property color. | P |
| 2 | Player fully develops own property | Number of houses: 4  Property type: Blue | Rent is set based the number of houses and the property color. | Rent is set based the number of houses and the property color. | P |
| 3 | Player has already developed the property until Hotel | Number of houses: 5  Property type: Orange | Rent is set based the number of houses and the property color. | Rent is set based the number of houses and the property color. | P |
| setRentCollected | 1 | Another player pays rent to the Player | Rent: 700  Rent collected: 0 | The rent collected is added to the attribute. | The rent collected is added to the attribute. |  |
| 2 | Player lands on own property | Rent: 700  Rent collected: 700 | The rent collected is not added to the attribute. | The rent collected is not added to the attribute. |  |
| 3 | Player lands on another property of some player | Rent: 700  Rent collected: 700 | The rent collected is not added to the attribute. | The rent collected is not added to the attribute. |  |
| **Railroad** | computeRent | 1 | Player lands on his own railroad | Railroad: North  Owner: Player 1 | Rent is not computed. | Rent is not computed. | P |
| 2 | Player lands on unowned railroad | Railroad: North  Owner: none | Rent is not computed. | Rent is not computed. | P |
| 3 | Player lands on an owned railroad | Railroad: North  Owner: Player 3 | Rent is computed. | Rent is computed. | P |
| **Utility** | computeRent | 1 | Player lands on his own utility | Utility: Water  Owner: Player 1 | Rent is not computed. | Rent is not computed. | P |
| 2 | Player lands on unowned utility | Utility: Water  Owner: none | Rent is not computed. | Rent is not computed. | P |
| 3 | Player lands on an owned utility | Utility: Water  Owner: Player 3 | Rent is computed. | Rent is computed. | P |
| **ChanceCard** | doAction | 1 | Player lands on Chance Space and decides to immediately use the given card | Player position: at Chance Space | The corresponding action that matches with the card number in the method is done. | The corresponding action that matches with the card number in the method is done. | P |
| 2 | Player lands on Chance Space and decides to keep the given card | Player position: at Chance Space  Card: Get out of Jail free | Nothing happens. | Nothing happens. | P |
| 3 | Player lands on Jail and Chance Card is automatically used | Player position: at Jail  Card: Get out of Jail free | The corresponding action that matches with the card number in the method is done. (Jail fine is not deducted from Player’s cash.) | The corresponding action that matches with the card number in the method is done. (Jail fine is not deducted from Player’s cash.) | P |