# **Case 1: Correct Payout level**

**Description:** The player should receive the correct payout depending on their bet amount and the amount of dice their symbol appears face up on. If the players chosen symbol appears on one die, they get their bet back, if the symbol occurs on the top face of two dice, the player gets double their bet back. If the chosen symbol appears on the top of all three die, the players gets tripled their bet back, and if the players chosen symbol doesn’t appear on the top face of any three dice, the player loses their bet.

**Preconditions:**

* Player exists
* Player has enough money to place their bet
* Player places a bet in the bet range
* Player has picked their symbol on the die face
* Player has placed a bet

**Postconditions:**

* The winnings (if any) are paid back to the user depending on the amount of faces their chosen symbol appears on.

**Data required:**

* Player
* A correct placed bet
* A dice with the correct dice symbols
* Dice symbol corresponding to the face the bet was placed on

# **Case 2: Player reaches betting limit**

**Description:** Once the player reaches the betting limit, they are disallowed to place any further bets

**Preconditions:**

* Player exists

**Postconditions:**

* Player is denied to place their bet
* The game finishes

**Data required:**

* Player
* Players current funds

# **Case 3: Correct gaming odds**

**Description:** After a certain amount of rolls, the appearing die faces should occur at a certain percent. This is to make the game seem fair and not ‘rigged’ against the players favour.

**Pre-conditions:**

* Game should have a sufficient amount of turns to have a big enough census of data to determine appearing percent of each face
* Track the amount of appearing faces by recording them down after each roll

**Post-conditions:**

* Die faces appear matching their odds, with 8% bias towards the user (User only gets winnings 42% of the time).

**Data Required:**

* Records of each die face as it appears
* The calculated win/lose of the player

# **Case 4: Different die faces**

**Description:** Each die face should change per roll of the dice. That is, each face of the diamond should have roughly the same change of appearing than the other.

**Pre-conditions:**

* Game should have sufficient turns to gather enough information of the average die roll
* The appearing faces of each die should be recorded as they appear

**Post-conditions:**

* Each die face should have random chances of appearing and all die faces should have around the same appearances as each other.

**Data Required:**

* Records of each die face as it appears
* Calculated percentage of each die face appearing