**Simple Dice Games**

**Graphics Options:**

Save the Dice.mat file to your current MATLAB directory.

>> load Dice; % Loads cell array (1x6) of dice images

>> roll = randi([1 6] ,[1 2]) % Random roll of 2 dice – only allow values from 1 to 6

roll = 5 6

>> imshow( [ Dice{roll} ] ); % Displays the roll graphically for user



**Over 7 and Under 7:**

1. The game is played with two dice
2. The player specifies how much money he/she is betting on the roll
3. The player bets whether he/she will roll Under 7, Over 7, or Exactly 7
4. The player specifies how much money he/she is betting on the roll
5. The player rolls the dice
6. If the player bets incorrectly, he/she loses the amount of money in the bet
7. If the player bets correctly, the payoff is 1:1 for Under 7 and for Over 7 (that is, if the bet was $1 then the player wins $1) and is 4:1 for Exactly 7 (that is, if the bet was $1 then the player wins $4 for betting on and successfully rolling a 7).
8. Player can start game with any amount of money, and can bet any amount (<= total) for each game, until out of money or chooses to quit game. No negative bets.

**Rules of Craps:**

1. Craps is a dice game played with 2 die
2. The player begins by making first roll:
   1. *If the roll is a 7 or 11* **Player wins**
   2. *If the roll is a 2, 3, or 12* **Player loses**
3. Otherwise the player continues rolling:
   1. *If after the first roll, the player rolls a 7* **Player loses**
   2. *If the player rolls the same total as the first roll* **Player wins**
4. Player continues rolling until the first roll is repeated or a 7 is rolled.
5. Player can start game with any amount of money, and can bet any amount (<= total) for each game, until out of money. No negative bets. Have the pay off 1 to 1 on the bets.