```
classdef player < handle</pre>
   properties
        hand = [];
        handValue = 0;
    end
   methods
        % Gives player two cards
        function obj = player(cardDeck,dealer)
            if nargin == 0
                obj.hand = []
            else
                obj.hand = cardDeck.drawCard;
                obj.hand(end+1) = cardDeck.drawCard;
                if nargin == 2
                    if dealer == 1
                        obj.hand(1).cardFaceUp
                    end
                end
                obj.calcHandValue
            end
        end
        % New hand at the start of a new round
        function newHand(obj,cardDeck,dealer)
            obj.hand = cardDeck.drawCard;
            obj.hand(end+1) = cardDeck.drawCard;
            if nargin == 3
                if dealer == 1
                    obj.hand(1).cardFaceUp
                end
            end
            obj.calcHandValue
        end
        % Adds one card to player's hand
        function hit(obj,cardDeck)
            card = cardDeck.drawCard;
            if ~isempty(obj.hand)
                obj.hand(end+1) = card;
            else
                obj.hand = card;
            end
        end
        % Calculates the value of the player's hand
        % Will count an Ace as 11 if the hand value doesn't pass 21
        % Pass the function an argument == 1 "obj.calcHandValue(1)"
        % To calculate hand value based on altValues
        function calcHandValue (obj,altValues)
            if nargin == 2
                if altValues
                    cardValues = [obj.hand.altValue];
                    obj.handValue = sum(cardValues);
                end
            else
```

```
cardValues = [obj.hand.value];
               logic = cardValues == 1;
               if sum(logic) > 0
                   value1 = sum(cardValues)+10;
                   if value1 > 21
                       obj.handValue = sum(cardValues);
                   else
                       obj.handValue = value1;
                   end
                else
                   obj.handValue = sum(cardValues);
                end
            end
        end
    end
end
obj =
 player with properties:
         hand: []
    handValue: 0
ans =
 player with properties:
         hand: []
    handValue: 0
```

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