

You have been hired to work on a game development project and your first assignment is to develop some classes to support a particular card game.

Willie is a card game played where each player only gets 2 cards. Card Suit does not matter. The value of the players hand (his Willie) is the total of the face value of the two cards except... face cards are all worth 10 and Aces are always worth one. Create a class file project and add a WillieHand.cs class file. Copy the code for your class from the listing below.

```
public partial class WillieHand
{
    private int _CardOne;
    private int _CardTwo;
    private int _Willie;

    public WillieHand(int CardOne, int CardTwo)
    {
        _CardOne = CardOne;
        _CardTwo = CardTwo;
    }

    public int Willie
    {
        get
        {
            if (_CardOne > 10)
                _Willie = 10;
            else
                _Willie = _CardOne;
            if (_CardTwo > 10)
                _Willie = 10;
            else
                _Willie = _CardTwo;
            return _Willie;
        }
    }

    public int CardOne
    {
        get
        {
            return _CardOne;
        }
    }

    public int CardTwo
    {
        get
        {
            return _CardTwo;
        }
    }
}
```

Use Case	Card One Value	Card Two Value	Willie Value
For Part A			
1	9	Jack	19
2	Ace	Queen	11
3	King	Jack	20
4	7	2	9
5	Queen	9	19
6	10	King	20
For Part B			
7	Jack	Null	10
8	10	Null	10
9	9	Null	9
10	Ace	Null	1

Note: For those not familiar with playing card values, the value of numeric cards (2-10) is as shown. Face cards are Jack (11), Queen (12) and King (13). The value of an Ace can be different in different games, but in Willie it is always 1.

Part A: Add a test project and create unit tests for the above Use Cases 1 to 6.

Part B: A variation of the game allows the player to pass on the second card. If he/she wins with only one card then the points earned are doubled. Add tests for Use Cases 7-10 and if necessary modify your WillieHand class so that all unit tests pass.

Note: In the code for the WillieHand class, include comments where you detail any changes that you had to make to the classes as you completed the Lab.

```
//Example WillieHand for a Seven, King
WillieHand wh = new WillieHand(7, 13);
i = wh.CardOne; //Should be 7
i = wh.CardTwo; //Should be 13
i = wh.Willie;  //Should be 17
```