

I.T 7 Static and dynamic testing exercise:

Screenshot showing static testing (comments)

```
1 require_relative('card.rb')
2 class CardGame
3
4
5   def checkforAce(card)
6     if card.value = 1
7       return true
8     else
9       return false
10    end
11  end
12
13  dif highest_card(card1 card2) #Error here, should be 'def'
14  if card1.value > card2.value # The indentation is wrong here
15    return card.name #this should be card1.name as card is not set as a variable or parameter
16  else
17    card2
18  end
19 end
20 end # This 'end' is not necessary
21
22 def self.cards_total(cards)
23   total # total should have a starting value if it is a counter. Usually 0.
24   for card in cards
25     total += card.value
26     return "You have a total of" + total
27   end
28 end
29
```

Screenshot 2: Showing tests failing due to unnecessary 'end' keyword on line 25:

```
1  require('minitest/autorun')
2  require('minitest/rg')
3  require_relative('../testing_task_2')
4  require_relative('../card')
5
6  class TestCardGame < MiniTest::Test
7
8      def setup
9
10         @card1 = Card.new(spades, 1)
11         @card2 = Card.new(hearts, 10)
12     end
13
14     def test_check_for_ace
15         assert_equal(true, check_for_ace(@card1))
16     end
17
18 end
19
```

```
require_relative('card.rb')
class CardGame

    def checkforAce(card)
        if card.value == 1
            return true
        else
            return false
        end
    end

    def highest_card(card1 card2)
        if card1.value > card2.value
            return card.name
        else
            card2
        end
    end

    def self.cards_total(cards)
        total
        for card in cards
            total += card.value
            return "You have a total of" + total
        end
    end
end
```

```
cd: no such file or directory: specs
→ specs git:(master) × ruby card_game_spec.rb
card_game_spec.rb:3:in `require_relative': /Users/user/codeclan_work/PDA/PDA_Static_and_Dynamic_Task_A/testing_task_2.rb:25: syntax error, unexpected
rd_end, expecting end-of-input (SyntaxError)
    from card_game_spec.rb:3:in `<main>'
→ specs git:(master) ×
```

Screenshot 3: Tests written:

```
require_relative('card.rb')
class CardGame

  def checkforAce(card)
    if card.value == 1
      return true
    else
      return false
    end
  end

  def highest_card(card1 card2)
    if card1.value > card2.value
      return card1.name
    else
      return card2.name
    end
  end

  def self.cards_total(cards)
    total = 0
    for card in cards
      total += card.value
    end
    return "You have a total of" + total
  end
end
```

Tests Failing:

```
from card_game_spec.rb:3:in `<main>'  
[→ specs git:(master) ✖ ruby card_game_spec.rb  
/Users/user/codeclan_work/PDA/PDA_Static_and_Dynamic_Task_A/testing_task_2.rb:18:in `<class:CardGame>': undefined local variable or  
Game:Class (NameError)  
    from /Users/user/codeclan_work/PDA/PDA_Static_and_Dynamic_Task_A/testing_task_2.rb:7:in `<top (required)>'  
    from card_game_spec.rb:3:in `require_relative'  
    from card_game_spec.rb:3:in `<main>'  
[→ specs git:(master) ✖
```

```
EEE  
  
Finished in 0.001442s, 2080.4439 runs/s, 0.0000 assertions/s.  
  
1) Error:  
TestCardGame#test_check_for_ace:  
NoMethodError: undefined method `value=' for #<Card:0x007fed999e4f88 @suit="spades", @value=1>  
Did you mean? value  
    /Users/user/codeclan_work/PDA/PDA_Static_and_Dynamic_Task_A/testing_task_2.rb:11:in `check_for_ace'  
    card_game_spec.rb:17:in `test_check_for_ace'  
  
2) Error:  
TestCardGame#test_highest_card:  
NameError: undefined local variable or method `hearts' for #<TestCardGame:0x007fed999e4ab0>  
    card_game_spec.rb:21:in `test_highest_card'  
  
3) Error:  
TestCardGame#test_self_cards_total:  
NameError: undefined local variable or method `cards' for #<TestCardGame:0x007fed999e4588>  
Did you mean? @card2  
              @card1  
    card_game_spec.rb:25:in `test_self_cards_total'  
  
3 runs, 0 assertions, 0 failures, 3 errors, 0 skips  
[→ specs git:(master) ✖
```

Screenshots showing the tests, the tests passing and the updated methods:

```
require('minitest/autorun')
require('minitest/rg')
require_relative('../testing_task_2')
require_relative('../card')

class TestCardGame < MiniTest::Test

  def setup

    @card1 = Card.new("spades", 1)
    @card2 = Card.new("hearts", 10)

    @cardgame1 = CardGame.new()
  end

  def test_check_for_ace()
    assert_equal(true, @cardgame1.check_for_ace(@card1))
  end

  def test_highest_card()
    assert_equal("hearts", @cardgame1.highest_card(@card1, @card2))
  end

  def test_self_cards_total()
    cards = [@card1, @card2]
    assert_equal("You have a total of 11", CardGame.cards_total(cards))
  end
end
```

Running:

...

Finished in 0.001060s, 2830.1886 runs/s, 2830.1886 assertions/s.

3 runs, 3 assertions, 0 failures, 0 errors, 0 skips

→ specs git:(master) ×

```
5
6 require_relative('card.rb')
7 class CardGame
8
9
10  def check_for_ace(card)
11    if card.value == 1
12      return true
13    else
14      return false
15    end
16  end
17
18  def highest_card(card1, card2)
19    if card1.value > card2.value
20      return card1.suit
21    else
22      return card2.suit
23    end
24  end
25
26  def self.cards_total(cards)
27    total = 0
28    for card in cards
29      total += card.value
30    end
31    return "You have a total of " + total.to_s
32  end
33 end
```