

StdIn Data:

ababababababbbbabbaaaaaaaaaaaaaaaaaaaaaa

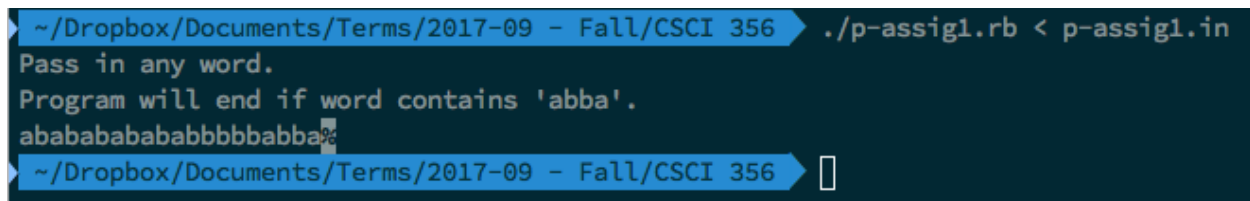
StdOut Data:

ababababababbbbabba

Program Returns:

1

Note: 1 for true

A terminal window with a dark background and light blue text. The prompt is ~/Dropbox/Documents/Terms/2017-09 - Fall/CSCI 356. The command ./p-assigl.rb < p-assigl.in is entered. The program outputs: Pass in any word. Program will end if word contains 'abba'. Then the input ababababababbbbabba is entered. The prompt returns to ~/Dropbox/Documents/Terms/2017-09 - Fall/CSCI 356 with a cursor.

Code:

```
#!/usr/bin/env ruby
#
# This program accepts and outputs characters until the substring
# "abba"

require 'io/console'

def get_char
  #STDIN.getch
  STDIN.getc
end

# Returns a boolean value via the final state q4
def q0
  letter = get_char
  print letter
  return q1 if letter == 'a'
  return q0 if letter == 'b'
  return q0
end
```

```
def q1
  letter = get_char
  print letter
  return q1 if letter == 'a'
  return q2 if letter == 'b'
  return q0
end

def q2
  letter = get_char
  print letter
  return q1 if letter == 'a'
  return q3 if letter == 'b'
  return q0
end

def q3
  letter = get_char
  print letter
  return q4 if letter == 'a'
  return q0 if letter == 'b'
  return q0
end

# Returns a boolean value, true if final state is reached.
# We don't actually execute the loop on q4 so it's disabled here.
def q4
  #letter = get_char
  #print letter
  #return q4 if letter == 'a' || letter == 'b'
  return true
end

puts "Pass in any word."
puts "Program will end if word contains 'abba'.\n"
q0
```