CodeGolf

Create something in 1024 characters

Create something in 140 characters

Create something

Constraints stimulate Creativity

~/Code/rubysauna

https://www.youtube.com/watch?v=Ugz_oOWOzlM&feature=youtu.be

```
(f=proc{|x,y|sleep 1;puts
"\033c",x;f[x.gsub(/\/\
\./,'~/\\').gsub(/.o./,y ?
'\o/':'|o|'),!y]})['~/\
\'+'~'*12+'o~~']
```

116 characters ...but what do they mean?

☺ cat lucas.md

Lucas Dohmen

* Consultant @ innoQ GmbH
* From Cologne, Germany
* Open Source Developer
* Podcaster
* CoderDojo Cologne Organizer
* Code Golfer

```
(f=proc{|x,y|sleep 1;puts
"\033c",x;f[x.gsub(/\/\
\./,'~/\\').gsub(/.o./,y ?
'\o/':'|o|'),!y]})['~/\
\'+'~'*12+'o~~']
```

Recursion using a Proc

```
(f=proc{|x,y|
  sleep 1
  system 'clear'
  puts x
  f[…]
})[…]
```

Calling a Proc

```
>> f = proc { |a,b| puts a }
=> #<Proc:0x007fa918b3c7c0@(irb):1>
>> f['hello']
hello
=> nil
```

Calling a Proc

```
>> f = proc { |a,b| puts a }
=> #<Proc:0x007fa918b3c7c0@(irb):1>
>> f['hello']
hello
=> nil
```

Arguments that were not provided are initialised as nil (not the case for a lambda)

Calling a Proc


```
>> f = proc { |a,b| puts a }
=> #<Proc:0x007fa918b3c7c0@(irb):1>
>> f['hello']
hello
=> nil
```

Arguments that were not provided are initialised as nil (not the case for a lambda)

First time we call it...

```
'~/\\'+'~'*12+'o~~'
```

First time we call it...

```
'~/\\' + '~' * 12 + 'o~~'
```

```
=> '~/\~~~~~~~~~~~~o~~'
```

On every call from now on we will do two things

1. Move the shark
2. Change the arms

Moving the shark

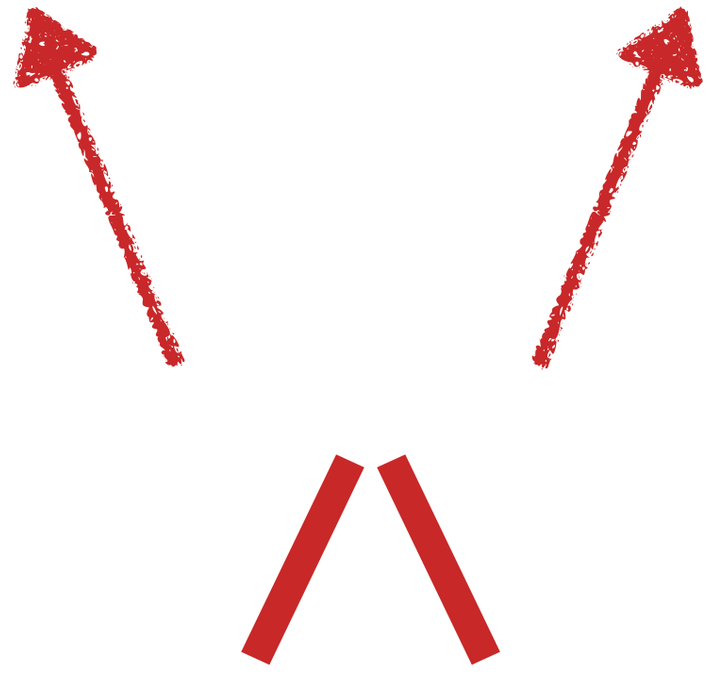
```
x.gsub(/\/\\\./,'~/\\')
```

Moving the shark

```
x.gsub(/\/\\\./, '~/\\')
```

Moving the shark

```
x.gsub(/\/\\\./, '~/\\')
```



Moving the shark

```
x.gsub(/\/\\\./,'~/\\')
```

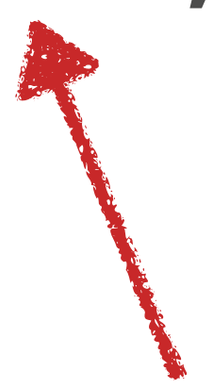
Moving the shark

```
x.gsub(/\/\\\./,'~/\\')
```

remove one character from the right

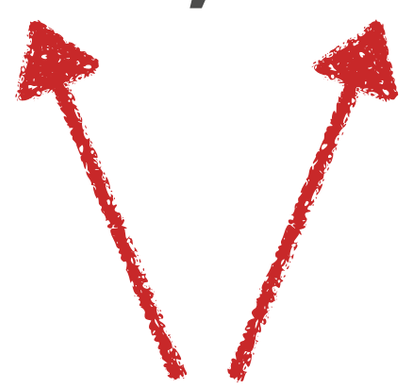
Moving the shark

```
x.gsub(/\/\\\./, '~/\\')
```



Moving the shark

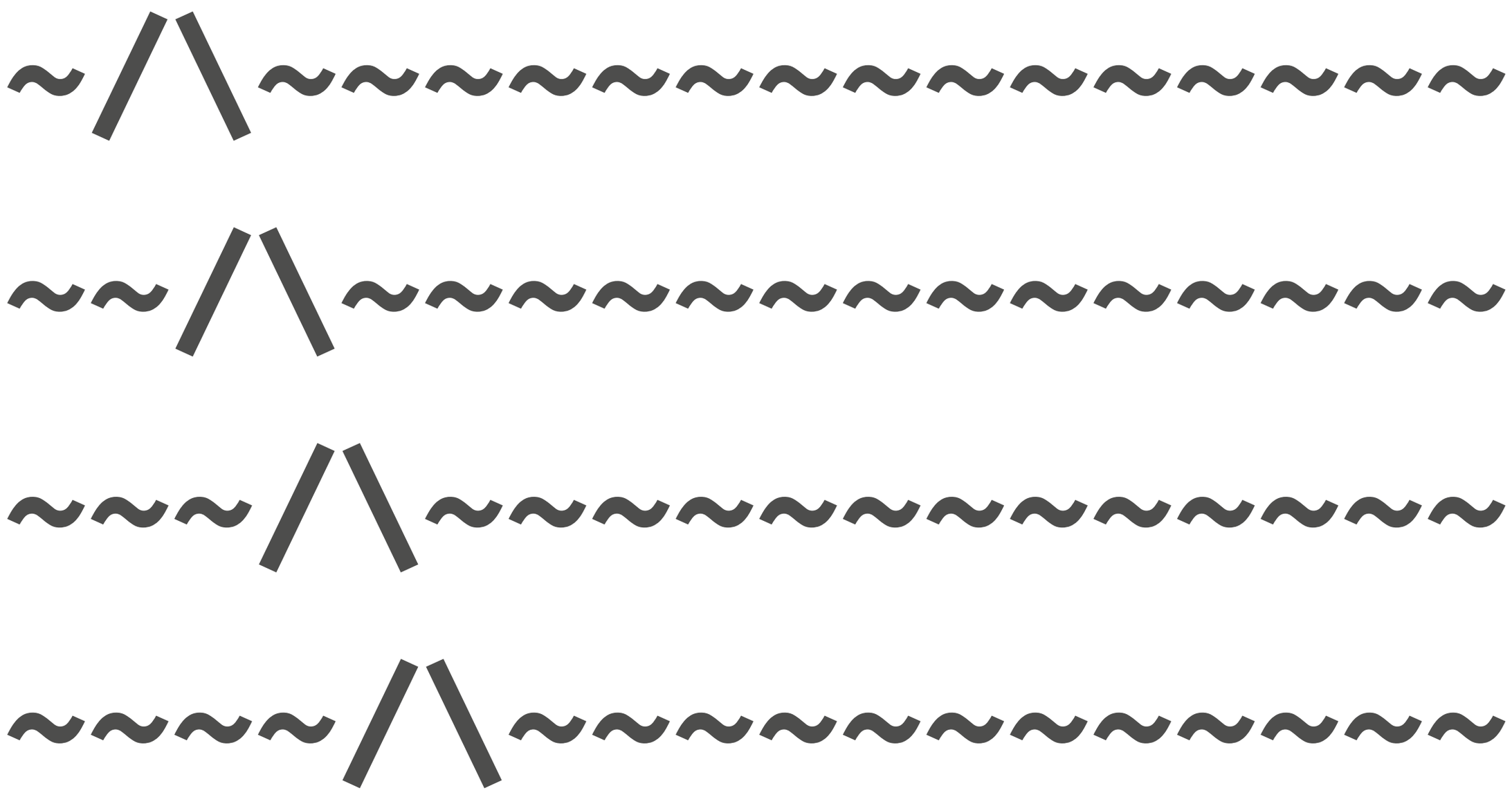
```
x.gsub(/\/\\\./, '~/\\')
```



add one wave

to the left

Moving the shark



Changing the arms

```
.gsub(/.o./,y ? '\o/':'|o|')
```

Changing the arms

```
.gsub(/.o./,y ? '\o/':'|o|')
```

matches all stages

~o~ \o/ |o|

of the animation

Changing the arms

```
.gsub(/.o./,y ? '\o/':'|o|')
```

depending on y

we change it to

either \o/ or |o|

Changing the arms

```
(f=proc{|x,y|
    sleep 1
    system 'clear'
    puts x
    f[…,!y]
})[…]
```

```
(f=proc{|x,y|sleep 1;puts
"\033c",x;f[x.gsub(/\/\
\./,'~/\\').gsub(/.o./,y ?
'\o/':'|o|'),!y]})['~/\
\'+'~'*12+'o~~']
```

~/Code/rubysauna

https://www.youtube.com/watch?v=d68x-RI-yqw&feature=youtu.be

This app has one main trick:

The list is 1-

indexed

If you enter a line it will be stored as

1. a string
2. a fixnum

If the fixnum is 0
it is a todo item
otherwise
it is a check-off action

```ruby
'Clean the house'.to_i #=> 0
'12'.to_i #=> 12
'0'.to_i #=> 0
```

```
'Clean the house'.to_i #=> 0
'12'.to_i #=> 12
'0'.to_i #=> 0
```

There is no item 0, does not matter

```ruby
todo_list = []

loop do
  input_as_string = gets
  input_as_int = input_as_string.to_i
  system "clear"

  if input_as_int > 0
    todo_list.delete_at(input_as_int - 1)
  else
    todo_list << input_as_string
  end

  todo_list.each_with_index do |item, index|
    puts "#{index+1}: #{item}"
  end
end
```

Ok, that's pretty short.

Now let's golf it.

```
input_as_string=gets;input_as_int=input_as_string.to_i
input_as_int=(input_as_string=gets).to_i
```

```
input_as_string=gets;input_as_int=input_as_string.to_i
input_as_int=[redacted]_as_string.to_i
[redacted]
```

Use ternary if/else instead of if/else

```ruby
todo_list.each_with_index do |item, index|
  puts "#{index+1}: #{item}"
end
```

```ruby
todo_list.each_with_index do |item, index|
  puts "#{index+1}: #{item}"
end
```

Way too long...

```ruby
todo_list.each_with_index{|item, index| puts "#{index+1}: #{item}"}
```

```
todo_list.each_with_index{|item, index| puts "#{index+1}: #{item}"}
index=0;todo_list.each{|item|puts "#{index+=1}: #{item}"}
```

```
todo_list.each_with_index{|item, index| puts "#{index+1}: #{item}"}
index=0;todo_list.each{|item|puts "#{index+=1}: #{item}"}
index=0;todo_list.map{|item|puts "#{index+=1}: #{item}"}
```

```
todo_list.each_[redacted]x{|item,[redacted]ex| puts "#[redacted]ex+1}: #{item}"}
index=0;todo_li[redacted]item|put[redacted]{index+=1}:[redacted]tem}"}
index=0;todo_list.map{|item|puts[redacted]index+=1}:[redacted]em}"}
```

```
todo_list = []
loop do
  input_as_int=(input_as_string=gets).to_i
  system "clear"
  input_as_int>0?todo_list.delete_at(input_as_int-1):todo_list<<input_as_string
  index=0
  todo_list.map{|item|puts "#{index+=1}: #{item}"}
end
```

Replace names & save whitespace

```
t=[]
loop{i,j=(s=gets).to_i,0
system "clear"
i>0?t.delete_at(i-1):t<<s
t.map{|g|puts "#{j+=1}: #{g}"}}
```

103 characters

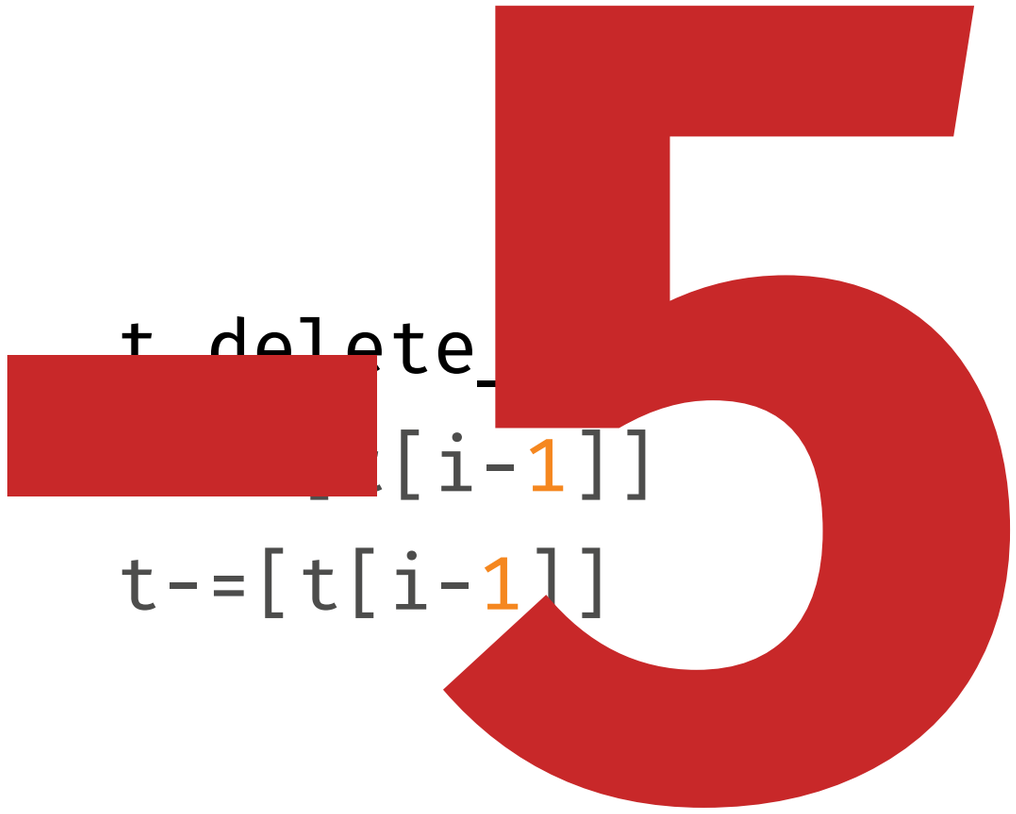
bonus round

delete_at is way too long

```
t=[]
loop{i,j=(s=gets).to_i,0
system "clear"
i>0?t.delete_at(i-1):t<<s
t.map{|g|puts "#{j+=1}: #{g}"}}
```

```
t.delete_at(i-1)
t=t-[t[i-1]]
t-=[t[i-1]]
```

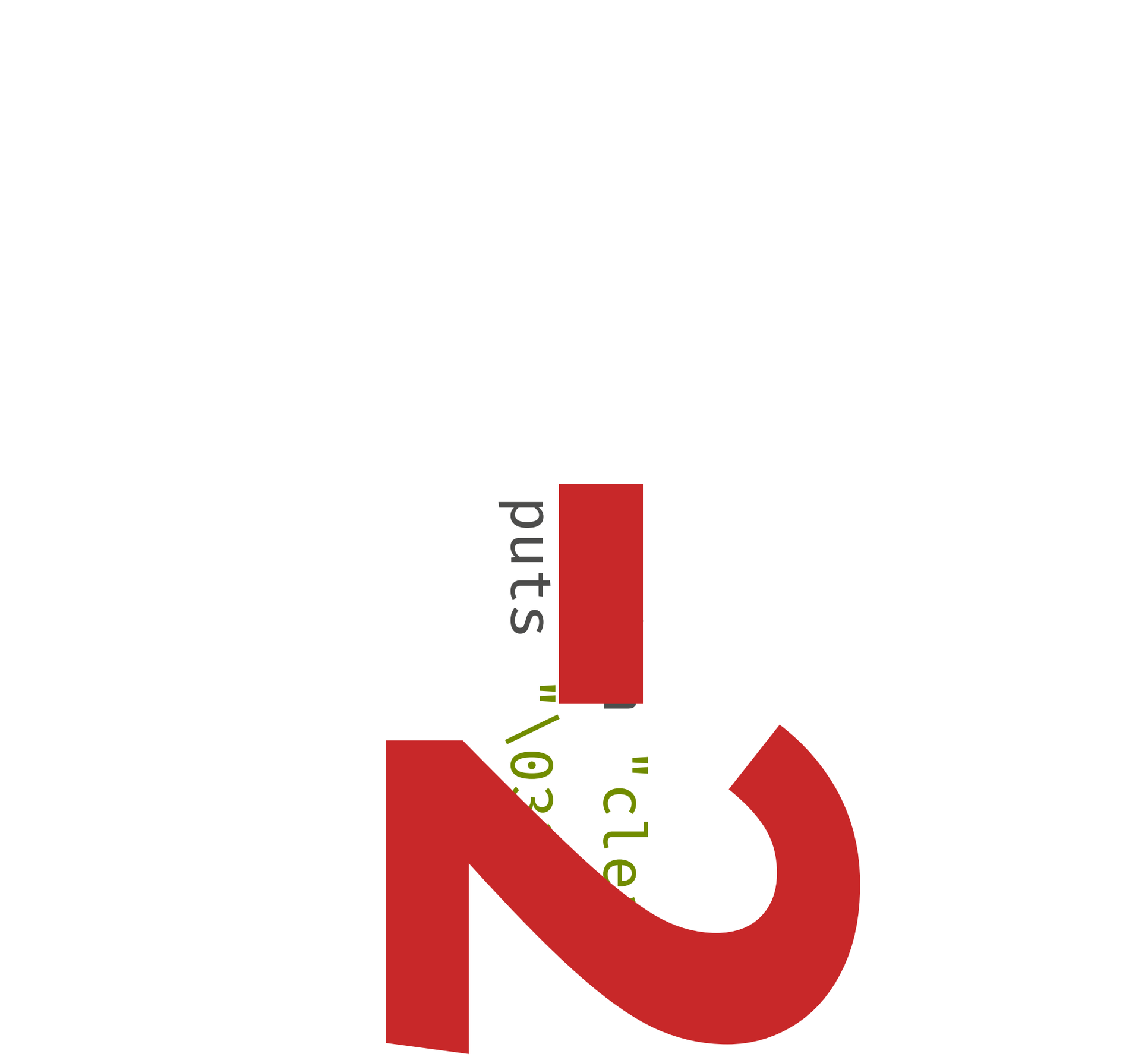
```
t_delete_
    [i-1]]
t-=[t[i-1]]
```



```
t=[]
loop{i,j=(s=gets).to_i,0
system "clear"
i>0?t-=[t[i-1]]:t<<s
t.map{|g|puts "#{j+=1}: #{g}"}}
```

```
t=[]
loop{i,j=(s=gets).to_i,0
system "clear"
i>0?t-=[t[i-1]]:t<<s
t.map{|g|puts "#{j+=1}: #{g}"}}
```

```
system "clear"
puts "\033c"
```


puts
"cle
\033

```ruby
t=[]
loop{i,j=(s=gets).to_i,0
puts "\033c"
i>0?t-=[t[i-1]]:t<<s
t.map{|g|puts "#{j+=1}: #{g}"}}
```

```
t=[]
loop{i,j=(s=gets).to_i,0
puts "\033c"
i>0?t-=[t[i-1]]:t<<s
t.map{|g|puts "#{j+=1}: #{g}"}}
```

DRY

DRY

```
t=[]
loop{i,j=(s=gets).to_i,0
puts "\033c"
i>0?t-=[t[i-1]]:t<<s
t.map{|g|puts "#{j+=1}: #{g}"}}
```

```
t=[]
loop{i,j=(s=gets).to_i,0
i>0?t-=[t[i-1]]:t<<s
puts "\033c"
t.map{|g|puts "#{j+=1}: #{g}"}}
```

```
puts "\033c";t.map{|g|puts "#{j+=1}: #{g}"}
puts "\033c",t.map{|g|"#{j+=1}: #{g}"}
```

```
puts "\033c[redacted]|g|puts "#{j+=1}: #{g}"}
puts "\033c",t.map{|g|"#{j+=1}: #{g}"}
```

```
t=[]
loop{i,j=(s=gets).to_i,0
i>0?t-=[t[i-1]]:t<<s
puts "\033c",t.map{|g|"#{j+=1}: #{g}"}}
```

```
t=[]
loop{i,j=gets.to_i,0
i>0?t-=[t[i-1]]:t<<$_
puts "\033c",t.map{|g|"#{j+=1}: #{g}"}}
```

```
t=[]
loop{i,j=get[redacted],0
i>0?t-=[t[i-1]]:t<<$_
puts "\033c",t.map{|g|"#{j+=1}: #{g}"}}
```

```
t=[]
loop{i,j=gets.to_i,0
i>0?t-=[t[i-1]]:t<<$_
puts "\033c",t.map{|g|"#{j+=1}: #{g}"}}
```

88 characters

88 characters?

Now we have

space again.

88 characters?

Now we have space again.

A persistent todo app in 129 characters.

```
loop{t=IO.readlines(?a)rescue[]
j=0
puts "\033c",t.map{|g|"#{j+=1}: #{g}"}
i=gets.to_i
i>0?t-=[t[i-1]]:t<<$_
IO.write ?a,t.join}
```

```
loop{t=IO.readlines(a)rescue[]
j=0
puts "#{i.m}lg#{j+=1}#{g}"}
i=gets.to
i>0?t-=[t[i-1]]:t<<$_
IO.write ?a,t.join}
```

~/Code/golf-course/ruby

https://www.youtube.com/watch?v=q5kSdZ7Rb3A&feature=youtu.be

Thank you

@moonbeamlabs