CSE 341 — Ruby Discussion Questions

1. Write a class Delay that implements delays (like the delay function in Scheme). The following code shows how it should work:

```
n = 0
d = Delay.new {n=n+1; 3+4}
d.force
d.force
v = d.force
e = Delay.new {1/0}
```

After we evaluate these statements v should be 7, but n should only be 1 (since we only evaluate the block once). Further, since we never force e, we shouldn't get a divide-by-zero error.

2. Write a min method for the Enumerable mixin. You'll need to decide how to handle finding the minimum of an empty collection. Bonus points for handling this in the same way Ruby itself does!

Hint: look at the implementation of map at the end of the inheritance.rb handout.

3. Consider the class and module definitions in self_super.rb linked from the 341 Ruby web page. Suppose we define a class C5 as follows:

```
class C5 < C1
  include M2
end</pre>
```

What is the result of evaluating these expressions?

```
x = C5.new
x.test1
x.test2
x.kind_of?(C5)
x.kind_of?(M2)
x.kind_of?(M1)
C5.ancestors
C5.superclass
C5.superclass.superclass
C5.superclass.superclass
```