Problem 6

a) Problem 4 function: 25 instructions
   Problem 5 function: 30 instructions

b) Problem 4 function takes **36 instructions** for an input of 3
   Problem 5 function takes 15 instructions for a base case, and 29 for a non-base case. The problem is solved according to the following tree:

```
          -> 1(Base)
   ->  2  -> 0(Base)

3

   ->  1(Base)
```

   Giving us 3 base cases and 2 non-base cases, or **103** instructions

c) The non-recursive function uses the most registers, since it needs to keep track of more values per function call, due to its looping nature

d) The recursive function uses the most memory, since it needs to keep track of more values as it recurses down

e) The non-recursive case (problem 4)