1.4 RAT

1. After running the following block of code:

```
>>> a = [1, 2, 3]
>>> b = a
>>> b[1] = 4
```

   A. What is the final value of `a`?

   B. Which of the following are `True`?
```
a) a is a
b) a == a
c) a is a[:]
d) a == a[:]
e) a is b
f) a == b
g) b is a[:]
h) b == a[:]
```

2. If I run:

```
>>> ofile = open('output.txt')
>>> ofile.write("Monty Python")
>>> ofile.close()
```

   I get an `IOError`. What do I need to change to make that work (so I can write the string `"Monty Python"` to the file `'output.txt'`)?

3. Which of these is preferred:

```
A. >>> for i, j in enumerate(x):
   ...       print i, j

B. >>> while i < len(x):
   ...       print i, x[i]
   ...       i += 1
```

   Why?

4. What will the following code output:

```
>>> print str
>>> str = 'foo'
>>> def fun():
...       str = 'bar'
...       print str
...
>>> fun()
>>> print str
```

   Hint: recall the LGB rule.