

CPSC 120B Final Review

Dec 4th, 2013

1 Terms

- Alias
- Boolean
- Binary
- Data Type
- Dictionary
- Expression
- Float
- Function
- Integer
- Iterate
- List
- Method
- Module
- Mutable
- Object
- Scope
- Statement
- String

2 Short Answer

1. What is the difference between an mutable and immutable data type? What are some examples of each?
2. What is aliasing? Why does it only affect mutable data types?
3. How do dictionaries differ from lists?

3 Tracing

4. For the following snippets of code, write what would be printed to the terminal. If an error would occur, write **error**. If nothing is printed, write **nothing**.

(a)

```
spam = [1]
for i in range(4):
    spam.append(spam[i] + spam[i])

print(spam)
```

(b)

```
spam = {1: 2, 2: 3}
print(spam[spam[1]])
```

(c)

```
spam = [[1, 2, 3], [4, 5, 6], [7, 8, 9]]
eggs = []
for i in range(3):
    eggs.append(spam[i][i])

print(eggs)
```

(d)

```
def spam(eggs):
    eggs.append(0)

ham = [1, 2, 3]
spam(ham)

print(ham)
```

(e)

```
def spam(eggs):
    eggs = eggs + "a"

ham = "123"
spam(ham)

print(ham)
```