1 FUNctions

1.1 What would Python display?

```python
>>> from operator import add, mul
>>> def f(x, y):
...     print('h', y)
...     return add(add(x, y), 1)
>>> def g(x, y):
...     print('u', x)
...     return mul(mul(x, y), 2)
>>> f(2, g(2, f(500, 2)))
```

2 Types

2.1 What would Python display for each expression?

(a) 3 + 4

(b) '3' + 4

(c) '3 + 4'

(d) '3' + '4'

2.2 Why does Python behave this way?

3 Moar FUNctions

3.1 >>> print(add(6, 1), print(7))
3.2 >>> `print(print("Welcome to"), print("CS 61A"))`

**User-defined Functions**

3.3 >>> `def boom():
...   return 1 / 0
...`  

>>> boom

>>> boom()

3.4 >>> `def square(x):
...   return x * x
...`  

>>> `def happy(num):
...   print(num)
...   return num
...`  

>>> `def sad(num):
...   return num
...   return 1 / 0
...`  

>>> `print(square(sad(5)), happy(3))`

4 **Beep Boop Bam**

4.1 What would Python display?

```python
>>> x = 6
>>> `def beep(x):
...   print(x)
...`  

>>> `def boop(x):
...   y = x
...   x = 7
...   print(x)
...`  

>>> y = beep(6)

>>> boop(28)

>>> y + beep(8)
```