

Sample Midterm #2

1. Evaluate each expression. If any cannot be evaluated, say why.
 - a. `3 + 5.0`
 - b. `"hello" + "goodbye"`
 - c. `7 * True`
 - d. `6 / "spam"`
 - e. `True and not False or True`
 - f. `"monty" <= "python"`
2. Convert the following into Python:
 - a. "hello" follows "goodbye" in the character ordering of the computer
 - b. The value of the variable *answer* is true or the value of the variable *y* is less than 126
 - c. The function *gleep* is called with an argument of -21
3. Convert the following into a "for" loop:

```
i = 1
while i < 10:
    print i * "x"
    i += 3
```

4. What does the following function do when given a string as the first argument and a string containing only one character as the second argument?

```
def f(s, c):
    i = 0
    while i < len(s):
        if s[i] == c:
            return i
        i += 1
    return -1
```

5. In the following program:

```
try:
    x = input("Enter a number: ");
    y = 1 / x;
except ZeroDivisionError:
    print "Nice try: you divided by 0"
except SyntaxError:
    print "What on earth did you type?"
except NameError:
    print "I have no clue what that name refers to"
except TypeError:
    print "I don't handle conversions well today"
else:
    print "The reciprocal of", x, "is", y;
```

please show five different inputs, each of which will execute a different print statement in the program.

6. What does the following program print?

```
def a(hi):  
    hi = 7  
    return hi + 3
```

```
def main():  
    hi = 8  
    lo = 3  
    print hi, lo  
    lo = a(hi)  
    print hi, lo
```

```
main()
```