

## Lecture 02 Exercises

### CS 51P – Fall 2022

1. Write a program that asks the user for a word and a positive integer and then writes the word that number of times with an exclamation point and a space in between.

```
word:  
    happy  
positive integer:  
    3  
  
happy! happy! happy!
```

2. After executing each snippet of code, the variable `val` stores a value of type `bool`. What value does it store?

A) `val = (5 > 0 and 5 < 10)`

B) `n = 25`  
`val = (n % 2 == 0 or n % 3 == 0)`

C) `s = "string"`  
`val = ("String" != s)`

D) `val = not True and False`

3. Consider the following program:

```
s1 = int(input())
if s1 % 4 == 0:
    print(4*s1)
if s1 % 2 == 0:
    print(2*s1)
else:
    print(s1)
```

What gets printed if the user inputs 2?

If they input 3?

If they input 4?

If they input 5.0?

4. Consider the following program:

```
x = int(input("pos int?\n\t"))
if x == 13:
    print("mine too!")
else:
    if x > 30 or x < 10:
        print("mine is 13")
    else:
        if x == 19:
            print("19!")
        else:
            print("?")
print("!")
```

Convert this program to a program with the same behavior that doesn't use nested if-statements.