

CSC108H Worksheet: Variable Assignment Statements

1. Changing variable values

(a) Consider this code:

```
k = 5
```

Write an assignment statement that creates a new variable `j` that refers to three times `k`'s value:

(b) Consider this code:

```
x = 4
```

```
y = 5
```

```
x = 2
```

After the code above is executed, to which value does `x` refer? _____

After the code above is executed, to which value does `y` refer? _____

(c) Consider this code:

```
x = 4
```

```
y = x + 2
```

```
x = y + 1
```

After the code above is executed, to which value does `x` refer? _____

After the code above is executed, to which value does `y` refer? _____

2. Swapping variable values

Assume that variables `a` and `b` have been assigned `int` values. Write code to swap which values `a` and `b` refer to: after your statements are executed, `a` should refer to the value that `b` used to refer to, and `b` should refer to the value that `a` used to refer to. Hint: use a third variable.

Once you have written the code, trace your code using the memory model to confirm that it correctly swaps the values: