**FOP 1 – Lab 3 Worksheet**

**PART C**

1. **What is the output of each of the following blocks of code? Do they compile? Do they give errors when you try to run them?**

* System.out.printf("Price:%10.2f\n", 25.33333); - 25.33
* System.out.printf("Price:%.2f\n", “25.33333”); - Won’t compile
* System.out.printf("Price:%n%d\n", 25.33333); - Error when run
* System.out.printf("Price:%nd\n", 25.33333); - d
* String name = “Anna”; int age = 5; -

System.out.printf(“Hello %s, you are %d today", name, age); - Will compile and work

* System.out.printf("hello world"); - Will compile and work
* System.out.println(“We need to use the \\ to escape some special characters”); - Will compile and work
* System.out.printf(“Hello“ + “\tWorld”); - Will compile and work
* System.out.printf("hello %cworld", '@'); - “hello @world”
* System.out.print("\*\n\*\*\n\*\*\*\n"); Will compile and work

1. **What is wrong with the following statements? (assume imports and in already declared and created)**

double unitPrice = in.nextInt();

int quantity = in.nextInt();

double line of code should have in.nextDouble(); instead of nextInt.

1. **What is problematic about the following sequence?**

System.out.print("Please enter the unit price: ");

double unitPrice = in.nextDouble();

Scanner in = new Scanner(System.in);

Scanner util input is only declared after Scanner required code

1. **What is problematic about the following sequence?**

Scanner sc = new Scanner(System.in);

System.out.print("Please enter the unit price: ");

double unitPrice = in.nextDouble();

Scanner “sc”

1. Using the printf method, print the values of the varriables **quantity** and **unitPrice** so that the output looks something like this, that is, the numbers should line up to the right:

Quantity: 10

Unit Price: 25.3

System.out.printf("Quantity: %10d%n", 10);

System.out.printf("Unit Price: %8.1f%n", 25.3);

1. **What do the following statements output?**

* System.out.println(10 / 4); = 2
* System.out.println(3.0 / 2); = 0.75
* System.out.println(1 / 2); = 0
* System.out.println(1 % 2); = 1

1. **What is the value of**

* 1729 / 10 = 172
* 1729 % 10 = 9

1. **What is the value of variable a after executing all the following code?**

int a = 37; a = a + 5 / 2; int b = 3 + 4 \* 3 / 5; a = b; a = a + 2;

a = 7