
Unit1 Review

Intro CS

February 23, 2014

Part I

Unit 1 – Review Worksheet

1. What is the output of the following code?

- $(6 + (2 ** 3)) / 2$
- $5 \% 3$
- `"5" * 5`
- `"Hello" + "World"`

2. Bagel Store

Suppose you own a bagel store and you made a bunch of bagels this morning. You want to figure out how many more bagels you need to make so that you could sell them in bags of a dozen. For example, if you have already made 23 bagels, you would need to make 1 more bagel this morning.

Let the variable **current_bagel_count** stores the number of bagels you already made. Write a program to print out the number of additional bagels you need to make.

3. What is the type of the following values?

- 1.0
- "Welcome to Computer Science Class!"
- 1.48
- 90000

4. What does the following program do?

```
In []: your_name = raw_input("What is your name? ")
       your_color = raw_input("What is your favorite color? ")
       print "It is nice to meet you " + your_name + "."
       print "My favorite color is also " + your_color + "."
```

5. Area of an Equilateral Triangle

Write a program that finds the area of an equilateral triangle if all the sides have length 7. Recall the formula for the area of an equilateral triangle is $\frac{\sqrt{3}}{4}x^2$, where x is the length of a side.

6. Is the following legal code? If not, explain why.

- `hair_color = "brown"`
- `10(3 + 4)`
- `100balloons = "a lot of balloons"`