

CS 1400 – Summer 2018

Assignment #3

Introduction

You will complete two programs to give you experience with:

- Turtle
- Variables
- Assignments
- Arithmetic operations

Task 1

You will draw a picture using turtle. Draw a picture of a snowman. It must have 3 circles for the body (head included), eyes, mouth, 3 buttons on its “coat”, a hat, and arms and hands (sticks). Name your file task1.py

Rubric

10 pts: Body is comprised of 3 white circles

10 pts: Face has black circle eyes, and a mouth (you choose how to make it)

10 pts: Hat with a filled in color

10 pts: Stick arms with at least 3 fingers on each hand

5 pts: Three colored circles for “coat buttons”

5 pts: Proper comments at the top of the file with your name, assignment number, and description of the program.

Task 2

Calculate information about a cuboid (a cuboid with all square sides is a cube. A cuboid can be shaped like a brick). Ask the user for appropriate input for the length, height, and width. Then present the user with information about the cube. Include the surface area, volume, and lengths.

Your program should store all values and calculation results as variables. Only variable names (not calculations) should be part of the print function. Use proper naming conventions for your variables. Also include comments at the top of your file that include your name, assignment number, and a description of your program. Name your file task2.py

Example running of program

Welcome to the Cuboid Calculator!

Please enter values in feet.

Enter the length: 5

Enter the width: 10

Enter the height: 8

Your 5 X 10 X 8 cuboid has a volume of 400 cubic feet and a surface area of 340 square feet.

Your program should work for integral (whole) numbers and floating-point (decimal) numbers.

Rubric

10 pts: Read values properly

10 pts: Messages print properly

10 pts: Output is accurate

10 pts: Proper use of variables

10 pts: Proper naming conventions

Helpers

Remember that you can find solutions to the even programming exercises online. Check Canvas for a link. These are suggestions for you to do. They are not part of the assignment, and you do not have to turn them in.

Exercises: 2.2, 2.4

What/How To Turn In (READ THIS)

Submit your files on Canvas.

Make sure to submit with appropriate conventions! Remember, your submission file should be named Last-First-Assn3.zip. Your project folder should use the same (without the zip)

Due: May 16, 2018