

CMPS 150

Spring 2020

Programming Assignment #3

Date Assigned: Tuesday, February 11, 2020

Due Date: 11:55 PM, Saturday, February 15, 2020

Objectives:

- using the Python IDLE environment, input/processing/output method, formatted output

- 1) Include the following information as comments at the beginning of your source code. Name it **pa3.py**
BE SURE it lines up nicely as you see it below.

```
# Author:          Type-Your-Name
# ULID:           Type-Your-ULID
# Course/Section: CMPS 150 - Lecture Section # ____
# Assignment:     pa3
# Date Assigned:  Tuesday, February 11, 2020
# Date/Time Due:  Saturday, February 15, 2020 -- 11:55 pm
#
# Description:     Determine the cost of a Mardi Gras order.
#                 Order can include 3 type of king cakes and possibly beads.
#                 Output includes a "neat & tidy" table.
#
# Certification of Authenticity:
# I certify that this assignment is entirely my own work.
```

2) Description

Write a program to process a Mardi Gras order. This program will utilize input statements AND selection statements. The Mardi Gras store sells king cakes and beads.

King cakes come in 3 flavors: cinnamon, blueberry and Bavarian. They also come in two sizes: small and large.

Your program must first ask for the number of each type of king cake the user would like. If the user enters more than zero (0) for the number of king cakes, you must then ask how many king cakes in that order are large king cakes. Your program will calculate the number that are small king cakes (that is, total – large).

If the total number of king cakes ordered is > 7, they get a discount of 10% on their king cake order.

Finally, ask the user if they would like to add an order of beads to their order. This should be a Y or N answer (the user will answer with uppercase letters only).

Here are prices: Large King Cakes: \$ 24.99, Small King Cakes: \$ 16.99, Order of Beads: \$ 20.00

The output of your program should look similar to the sample output. You must “pretty print” and display all king cake information in a neatly aligned table. All monetary values are to be displayed with two decimal points, and the values will not be larger than 9999.99

The number of large and small king cakes will be no larger than 999. The total king cake costs displayed in the table will be no larger than 9999.

3) Sample Run

How many Cinnamon King Cakes would you like? **3**
... and how many of these should be a large? **1**

How many Blueberry King Cakes would you like? **2**
... and how many of these should be a large? **0**

How many Bavarian King Cakes would you like? **0**

Would you an order of beads (Y/N)? **Y**

HAPPY MARDI GRAS			

King Cake	Large	Small	Cost

Cinnamon	1	2	58.97
Blueberry	0	2	33.98
Bavarian	0	0	0.00

Totals	1	4	92.95

Total Number of King Cakes: 5
Discount: \$ 0.00
Total Cost: \$ 92.95
Bead Cost: \$ 20.00
Total Cost (with beads): \$ 112.95

Another Sample Run

How many Cinnamon King Cakes would you like? **0**

How many Blueberry King Cakes would you like? **8**
... and how many of these should be a large? **8**

How many Bavarian King Cakes would you like? **0**

Would you an order of beads (Y/N)? **N**

HAPPY MARDI GRAS			

King Cake	Large	Small	Cost

Cinnamon	0	0	0.00
Blueberry	8	0	199.92
Bavarian	0	0	0.00

Totals	8	0	199.92

Total Number of King Cakes: 8
Discount: \$ 19.99
Bead Cost: \$ 0.00
Total Cost (with beads): \$ 179.93

Input by the user is indicated
by text that is
bold, underlined & italicized.
NOTE: It will not be bold,
underlined, and italicized
when YOU run your program.

4) Upload to Moodle

Get in a browser and login to Moodle.

Go to your Lecture Section on the Moodle site.

Click on the submission link for Programming Assignment #3.

Select to “Add a Submission” then “Upload a File”

Select to “Choose a File” and go about the process of browsing/finding “**pa3.py**” on the computer.

Select to “Upload this File”

When returned to the Upload screen, MAKE SURE to click on the “Save Changes” button.

You will be returned to the “Programming Assignment #3” screen.

This time you should see your source code file listed on it.

5) Logout of Moodle

*You can turn in programs
up to 24 hours late for a maximum of 75% credit
or up to 48 hours late for a maximum of 50% credit*