

Honors Computer Science Python

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Program 1A, 1B

Program 1A Comments And Output (15 points)

Write a program to identify whom the program listing and program output belongs to. Use a DocString (comment) at the beginning of the program and use print statements to display your output.

Include your Name, School I.D. Number, Program Number, Program Name, Honors Computer Science Python, Period Number, Starting Date, Due Date, and a description of the program in the comment section. Format your comments to follow the example shown below:

```
"""
*****
*
* Your Name Here Your ID Number Here
*
* Program 1A      Comments and Output
*
* Honors Computer Science Python      Period ?
*
* Starting Date: ??/?/20?? Due Date: ??/?/20??
*
* This program will identify the owner of this source code
* through the use of comments. It will also identify
* who the output belongs to through the use of print statements.
* This is an Python Template for use in future HTML Projects.
* This is a DocString in Python
*****
"""
```

For your output, use print statements to include your Name, School I.D. Number, Program Number, Program Name, Honors Computer Science Python, and Period Number. Format your output to look nice, be readable, include the asterisks, and not take up more than 8-10 lines. Use the comment section above as a guideline. Do not use the tab key when formatting your output, use the spacebar instead, otherwise the output will not "line up".

As you type all your programs this year, be sure not to type past the 80-column line.

Add this line as your last line of code in your program:

```
input("Press enter to quit the program")
```

Use this program as a "template" for all future programs. **Include this style of comments and output for every program throughout the class.**

Save your work in your "S" directory using the filename: LastNameFirstNameP1A.py. When you are sure that your program is ready to be graded save your program in the "T" network mapping, and the Program 1A folder.

Program 1B Circle (15 points)

Write a program to calculate the diameter, circumference, and area of a circle. Ask the user to enter a value for the radius. Make your program user friendly by prompting them for this value. Use one line comments to separate this program into its parts: input, calculations, and output.

- 1) Use a `DocString` at the beginning of the program for your comments.
- 2) Initialize all of the variables that are to be used in this program.
- 3) Use print statements to display your name and period output just like those used for program 1A.
- 4) Ask the user for the radius.
- 5) Perform all of the calculations.
- 6) Echo out the value of the radius as well as the results of your calculations for the diameter, circumference, and area of the circle. Make sure that you use descriptive identifiers for all of your variables.

The formulas are:

```
diameter = 2 * radius  
circumference = diameter * pi  
area = pi * radius **2
```

Don't declare a constant for PI, just use 3.14 for now.