Programming Assignment 7

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1. You are going to figure out which months are in which quarter. Write a program that asks the user for a month as a number between 1-12. The program should display a message indicating whether the month is in the first quarter, the second quarter, the third quarter or the fourth quarter of the year. If the user inputs a number that is not between 1-12 the program should display an error. You will use the if – elif – else format. Watch your indenting!!!
2. Write a program that will ask a user to enter an integer. The program should display “Positive” if the number is greater than 0, “Negative” if the number is less than 0, and “Zero” if the number is equal to 0. The program should then determine if the number is “Even” or “Odd”.

* You should end up with an if-elif-else, & and if- else statement
* Use % 2 == 0 as the equation to figure out even or odd

1. Rectangles: Area = length x width

Write a program that asks for the length and width of 2 rectangles. The program should determine and tell the user which rectangle has the greater area or if they are the same.

* For this go back to chapter 2; declare 6 variables;
* Get your input;
* Print statement for the Area of 1 (format precision 2) Ex: print(‘Area of triangle 1 is: ’, format(area1, ‘.2f’))
* Print statement for the Area of 2 (format precision 2)
* If-elif-else statements with their own print statements

1. Assume hot dogs come in packages of 10

Hot dog buns come in packages of 8

Write a program that calculates the number of packages of hot dogs and the number of packages of hot dog buns needed for a cookout, with the minimal amount of leftovers possible. The program should ask the user for the number of people attending.

Ask the number of hot dogs each person will be given.

The program should display the following details:

* The minimum number of packages of hot dogs required
* The minimum number of packages of hot dog buns
* The number of hot dogs that will be left over
* The number of hot dog bun that will be left over

This is not a decision structure to start off. Starts as a program as in Chapter 2, that contains decision structures. For this to be correct you should have in this order! :

* 7 variables
* 2 constants
* 2 get statements
* 2 calculate statements
* #determine if the number of people attending is large enough to require more than one package of hotdogs
* *If statement* for minimum dogs > 0; you will use the modulus for calculation.
* If there is a remainder from above statement another
* *if statement* that uses != and +=
* *Else statement*
* #determine the number of left over hot dogs, if any
* Calculation statement
* #determine # of hot dog buns needed
* Calculation statement
* #determine if the number of people coming are large enough to require more than one package of hot dog buns
* *If statement* modulus
* *If statement* != 0 and +=
* *Else statement*
* Calculate the number of buns leftover if any
* Display min packages of hot dogs (sentence with variable that prints expression)
* Display min packages of buns (sentence with variable that prints expression)
* Display number of hot dogs left over (sentence with variable that prints expression)
* Display number of buns left over (sentence with variable that prints expression)