

Nesneye yönelik programlama – Ödev 1

Ders kitabının bölüm sonu sorularından olan aşağıdaki iki soruyu çözen iki ayrı Visual Studio konsol uygulaması geliştiriniz.

- Ödevler grup halinde yapılacaktır ve gruptan tek bir kişinin grup numarası isminde bir zip dosyası yüklemesi gerekmektedir (Örnek: 2 numaralı grup 2.zip dosyası yüklemelidir). Birden fazla yükleme olması durumunda tüm grup üyeleri ilgili ödevden 0 notunu alacaktır.
- Ödevlerin kontrolü ödev son tarihinden sonra gelen ilk derste (dersin sonunda) yapılacaktır. Bu nedenle grubun ödevi sunacak/çalıştıracak şekilde sınıfta bulunması gereklidir.

3.26 (*Diameter, Circumference and Area of a Circle*) Here's a peek ahead. In this chapter, you have learned about integers and the type `int`. C# can also represent floating-point numbers that contain decimal points, such as 3.14159. Write an app that inputs from the user the radius of a circle as an integer and displays the circle's diameter, circumference and area using the floating-point value 3.14159 for π . Use the techniques shown in Fig. 3.14. [Note: You may also use the predefined constant `Math.PI` for the value of π . This constant is more precise than the value 3.14159. Class `Math` is defined in namespace `System`]. Use the following formulas (r is the radius):

$$\begin{aligned} \text{diameter} &= 2r \\ \text{circumference} &= 2\pi r \\ \text{area} &= \pi r^2 \end{aligned}$$

Don't store each calculation's result in a variable. Rather, specify each calculation as the value to be output in a `Console.WriteLine` statement. The values produced by the circumference and area calculations are floating-point numbers. You'll learn more about floating-point numbers in Chapter 4.

3.28 (*Digits of an Integer*) Write an app that inputs one number consisting of five digits from the user, separates the number into its individual digits and displays the digits separated from one another by three spaces each. For example, if the user types in the number 42339, the app should display

4	2	3	3	9
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Assume that the user enters the correct number of digits. What happens when you execute the app and type a number with more than five digits? What happens when you execute the app and type a number with fewer than five digits? [Hint: It's possible to do this exercise with the techniques you learned in this chapter. You'll need to use both division and remainder operations to "pick off" each digit.]