German University in Cairo
Computer Science and Engineering Department
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Introduction to Computer Science, Winter Term 2007-2008
Assignment 1

Submission: Thursday 15.11.2007 (17:00 pm)

Exercise 1-1   (5 Marks)

Write a pseudo-code algorithm that computes cost per square foot of a living space for a
house, given the dimensions of the house, the total cost of the house, and the size of the
non-living space (garage, closets, etc). For example, if the total cost of the house is 150000
L.E., the non-living space is 825 square foot, and the house width and length are 30 feet
and 40 feet respectively, then the cost per square foot of living space is 400 L.E per square
foot

Exercise 1-2   (10 Marks)

Gallon is a unit of measurement for volume, and it is equal to 4 quarts, each quart has 2
pints. The pint is equal to 20 ounces and each ounce has 8 drams. Write an algorithm in
pseudo-code that given the number of drams prints out how many gallons, quarts, pints,
and ounces are there. For example if the number of drams is 2015, then the output should
be as follows: You have: 1 gallon, 2 quarts, 0 pints, 11 ounces, and 7 drams.

Exercise 1-3   (5 Marks)

Write a pseudo-code algorithm that given the loan amount, the interest rate, and the number
of months, it determines the monthly payment. The total amount of interest over the given
loan is the interest rate multiplied by the number of years multiplied by the loan amount.
For example, if the loan amount is 60,000 L.E., the interest rate is 11% , and the number of
months is 40, then the output should be as follows: Your monthly payment is: 2050 L.E.