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**KING SAUD UNIVERSITY**

**College of Applied and Community Services**

**GC201**

**First Semester 1436-1437**

**Tutorial #8**

**Q1: What is the output of the following program:**

Module Module1

Public Const BonusRate As Decimal = 1.45D

Public Const PayRate As Decimal = 14.75D

End Module

Class Payroll

Overridable Function PayEmployee(ByVal HoursWorked As Decimal,ByVal PayRate As Decimal) As Decimal

PayEmployee = HoursWorked \* PayRate

End Function

End Class

Class BonusPayroll

Inherits Payroll

Overrides Function PayEmployee(ByVal HoursWorked As Decimal,ByVal PayRate As Decimal) As Decimal

' The following code calls the original method in the base

' class, and then modifies the returned value.

PayEmployee = MyBase.PayEmployee(HoursWorked, PayRate) \* BonusRate

End Function

End Class

Module Test

Dim PayrollItem As Payroll = New Payroll

Dim BonusPayrollItem As New BonusPayroll

Dim HoursWorked As Decimal = 40

MsgBox("Normal pay is: " & PayrollItem.PayEmployee(HoursWorked, PayRate))

MsgBox("Pay with bonus is: "&BonusPayrollItem.PayEmployee(HoursWorked, PayRate))

End Module

**Q2:**

**A : Write the definition of class Example as follows:**

1. Three instance variables x, y and z; types float, String and Boolean.
2. One public shared data member s with initial value 10.
3. Three constructors: one default, one with three parameters and one with one parameter that initializes x the other variables are set to their default values.
4. Four Properties to set and get each of the four data members

**B: Write a client program for class Example above that creates and prints the following objects:**

1. a, b and c objects each using the different constructors.

**C: Write statements that do the following:**

1. Set the value of **s** to 8 without using any of the objects.
2. Increment **s** by 2 every time an object is created.