**Exercise 2**

PART A

Create variables hours, rate, and wages

Create the constant variable overtime and set it equal to 1.5

When the user clicks the “wage” button…

Get the hours from the user

Get the rate from the user

If hours < 40 Then calculate wage normally

ElseIf hours > 40 Then calculate wages using overtime pay

Display Wages

*PART B*

If radyes is checked then deducted taxes from wage

**Exercise 3**

Create variables numCopies and pricePerCopy

When the user clicks the “Price” button…

Get the numCopies of copies from the user

If numCopies is between 0 and 499 Then pricePerCopy is $0.3

ElseIf numCopies is between 500 and 749 Then pricePerCopy is $0.28

ElseIf numCopies is between 750 and 999 Then pricePerCopy is $0.27

ElseIf numCopies is greater than 999 pricePerCopy is $0.25

Display pricePerCopy

Calculate totalPrice

Display totalPrice

**Exercise 4**

Just recalled that cubic centimeters is a *volume*. Volumes are calculated by multiplying the length, width, and height of an object (in this case, a box!)

**Exercise 7**

Create a variable currentGrade (what kind of input is this??)

Create variables numPass, numFail and initialize to zero

When the user clicks the “Enter Grade” Button…

Get the currentGrade from the user

If CurrentGrade is an “A” or a “B” or a “C” or a “D” then increase numPass by one

ElseIf CurrentGrade is an “F” then increase numFail by one

Else display “Invalid Grade!”

Display the number of students who have passed

Display the number of students who have failed

**Exercise 8**

Create const variables basicCharge and addOption and initialize to correct values

Create variable totalBill

Create variable numOptions and initialize to zero

When the user clicks the “calculate” button…

If Call Waiting is checked, then increase numOptions by one

If Call Forwarding is checked, then increase numOptions by one

If Caller ID is checked, then increase numOptions by one

totalBill = basicCharge + (addOption times numOptions)

Display totalBill

**Exercise 10**

Create global variables ranNum1, ranNum2, ranOperator, solution, userGuess

When btnNewProblem is clicked…

Generate two random numbers and assign them to ranNum1 and ranNum2

Generate a random operator between 1 and 4 and assign it to ranOperator

Display the two random numbers

Use an if statement to determine whether the question will be \*,+,-, or /

(Use 1 for \*, 2 for +, 3 for -, and 4 for /)

Determine the solution and assign it to the variable solution

When btnCheckAnswer is clicked…

If userGuess = solution display “you are correct!”

Else display “incorrect, practice some more!”

When btnShowAnswer is clicked…

Display “The answer is” and the solution

**Exercise 11**

Const small = 2.5

Const large = 4

Const cheese = 0.5

Const lettuce, onion = 0.1

Const tomato = 0.25

Double total = 0.0

If sandwich size small checked then total += small

If sandwich size large checked then total += large

If cheese checked then total += cheese

If lettuce checked then total += lettuce

If onion checked then total += onion

If tomato checked then total += tomato

Display total

**Exercise 13**

Use static variables for the random numbers you generate for colors and letters!

Make sure your counters reset each time the player hits the “check guess button” by making them local variables that are NOT static (Dim)

Use static variables for letter1 to letter3

Store the user guesses in variables txtbox1 to txtbox3

‘Check for correct colors

This is up to you!!!

‘Check for correct positions

If txtbox1 = letter1 Then increase positionsCorrect by 1

If txtbox2 = letter2 Then increase positionsCorrect by 1

If txtbox3 = letter3 Then increase positionsCorrect by 1

‘Display the info

Display colorsCorrect

Display PositionsCorrect

‘Check to see if the user won the game

If (txtbox1 = letter1 And txtbox2 = letter2 And txtbox3 = letter3 Then Display a “YOU WIN” message

Else “try again!”