Psuedocode for Bates – RCP

**Retirement Calculator Form**

**For the Calculate Button:**

We declare the variables:

Dim frmRetirementReport as New Retirement Report

Dim decAnnualIncome as Decimal

Dim decYears As Decimal

Dim decInterestRate As Decimal

Dim decInflationRate As Decimal = 0.04D

Dim decCostOfLivingIncrease As Decimal

Dim decFutureValue As Decimal

Dim decAmountInvested As Decimal

Dim decMonthlyPayment As Decimal

Dim decNumberOfPymts As Decimal

Dim blnValidateInput As Boolean = True

Validate the User Input:

If Not Decimal.TryParse(txtAnnualIncome.Text, decAnnualIncome) Then

blnValidateInput = False

ElseIf decAnnualIncome <= 0 Then

blnValidateInput = False

End If

If Not Decimal.TryParse(txtYears.Text, decYears) Then

blnValidateInput = False

ElseIf decYears <= 0 Then

blnValidateInput = False

End If

If Not Decimal.TryParse(txtInterestRate.Text, decInterestRate) Then

blnValidateInput = False

ElseIf decInterestRate <= 0 Then

blnValidateInput = False

ElseIf decInterestRate >= 1 Then

blnValidateInput = False

End If

Calculate the values:

If blnValidateInput = False Then a message box shows saying

“Please enter positive numeric values in all fields. Interest rate must be a value between 0 and 1.”

If blnValidateInput = True Then

decCostOfLivingIncrease = (decAnnualIncome \* decInflationRate \* decYears)

decFutureValue = decCostOfLivingIncrease + decAnnualIncome

decAmountInvested = decFutureValue / ((decInterestRate / 2) \* 1)

decMonthlyPayment = CDec(decAmountInvested / (((1 + (decInterestRate / 12)) ^ (decYears \* 12) - 1) / (decInterestRate / 12)))

decNumberOfPymts = decYears \* 12

frmRetirementReport.lblAnnualIncome.Text = decAnnualIncome.ToString("c")

frmRetirementReport.lblMonthlyPayment.Text = decMonthlyPayment.ToString("c")

frmRetirementReport.lblInterestRate.Text = decInterestRate.ToString("p")

frmRetirementReport.lblNumberOfPymts.Text = decNumberOfPymts.ToString()

frmRetirementReport.ShowDialog()

**For the Clear Button:**

This button will clear the text boxes and reset the focus to the annual income text box

**For the Exit Button:**

This button will exit the application

**For the About Button:**

This button will show the about page

**Retirement Report Form**

**For the Clear button:**

This button will clear the labels on this page and the textboxes on the Retirement Calculator page.

**For the Print button:**

This button will print the form

**For the Back to Calculator button:**

This button will close the Retirement Report form and bring you back to the Retirement Calculator form.