Pseudocode:

// constant for the number of months.

Constant Integer SIZE = 12

// Array to hold each month.

Declare String months [SIZE] = “January”, “February”, “March”, “April”, “May”, “June”, “July”, “August”, “September”, ”October”, “November”, “December”

// Array to hold each month’s rainfall.

Declare Real rainfall [SIZE]

// Get each month’s rainfall.

Declare Integer index

For index = 0 To SIZE -1

Display “Enter the rainfall of ” , index + 1, “month: ”

// Validate user input cannot accept negative numbers.

While rainfall [SIZE] < 0

Display “Rainfall must be greater than 0. ”

Display “Please enter correct value. ”

Input rainfall [index]

End While

End For

// Display the total for a year, average monthly rainfall, and highest and lowest amounts.  
Call display ()

End module

// The display module display each month’s rainfall, the average rainfall,

// the months with the highest and lowest amounts.

Module display ()

Display “Here is each month’s rainfall.”

For index = 0 To SIZE – 1

Display months [index], “:”, rainfall [index], " inche(s)."

End For

Display “The total rainfall for the year is ”, getTotal (rainfall, SIZE), " inches."

Display “The average rainfall for the year is ”, getAverage (rainfall, SIZE), " inches."

Display “The highest amount of rainfall was ”, months [index], “:”,GetLargestRainfall (rainfall, SIZE), " inches."

Display “The lowest amount of rainfall was ”, months [index], “:”, GetSmallestRainfall (rainfall, SIZE), " inches."

End module

// The getTotal function determines the total rainfall of the year.

Function getTotal (Real rainfall[], Integer arraySize )

Declare Real total = 0

For index = 0 To arraySize – 1

Set total = total + rainfall [index]

End For

Return total

End Function

// The getAverage function calculates the average rainfall of the year.

Function getAverage (Real rainfall[],Integer arraySize)

Declare Real average

Set average = getTotal (rainfall, SIZE) / Integer arraySize

Return average

End Function

// The GetLargestRainfall funtion finds the month with the highest amounts.

Function GetLargestRainfall (Real rainfall[],Integer arraySize)

Declare Real highest

Set highest = rainfall [0]

For index = 1 To arraySize – 1

If rainfall [index] > highest Then

Set highest = rainfall [index]

End If

End For

Return highest

End Function

// The GetSmallestRainfall funtion finds the month with the lowest amounts.

Function GetSmallestRainfall (Real rainfall[],Integer arraySize)

Declare Real lowest

Set lowest = rainfall [0]

For index = 1 To arraySize – 1

If rainfall [index] < lowest Then

Set lowest = rainfall [index]

End If

End For

Return highest

End Function