Challenge#2

Steve and his Parents need help with comparing stock and analyzing what will be the good option for them to invest in also this comparison will provided analysis of Total Daily Volume and Yearly Return for each target stock projected for a given year.

Findings

Analysis was done for 2 different year 2017 and 2018.

• In 2017 "DQ" made best yearly return with 199.4% but with lowest total Daily Volume 35,796,200

• In 2017, TERP (-7.2%) has negative returns, all other stocks did well.

• In 2018 , ENPH and RUN two stocks had positive yearly Return as well as large Total Daily Volume.

|  |  |  |
| --- | --- | --- |
| All Stocks (2017) |  |  |
|  |  |  |
| **Ticker** | **Total Daily Volume** | **Return** |
| AY | 136,070,900 | 8.9% |
| CSIQ | 310,592,800 | 33.1% |
| DQ | 35,796,200 | 199.4% |
| ENPH | 221,772,100 | 129.5% |
| FSLR | 684,181,400 | 101.3% |
| HASI | 80,949,300 | 25.8% |
| JKS | 191,632,200 | 53.9% |
| RUN | 267,681,300 | 5.5% |
| SEDG | 206,885,200 | 184.5% |
| SPWR | 782,187,000 | 23.1% |
| TERP | 139,402,800 | -7.2% |
| VSLR | 109,487,900 | 50.0% |

|  |  |  |
| --- | --- | --- |
| All Stocks (2018) |  |  |
|  |  |  |
| **Ticker** | **Total Daily Volume** | **Return** |
| AY | 83,079,900 | -7.3% |
| CSIQ | 200,879,900 | -16.3% |
| DQ | 107,873,900 | -62.6% |
| ENPH | 607,473,500 | 81.9% |
| FSLR | 478,113,900 | -39.7% |
| HASI | 104,340,600 | -20.7% |
| JKS | 158,309,000 | -60.5% |
| RUN | 502,757,100 | 84.0% |
| SEDG | 237,212,300 | -7.8% |
| SPWR | 538,024,300 | -44.6% |
| TERP | 151,434,700 | -5.0% |
| VSLR | 136,539,100 | -3.5% |

Code Review

The program designed consist of 4 main loops

1. Main Loop where all tickerIndex are assigned.

2. Second is a nested loop inside the main loop, to go through data and fetch following information

• ticker name

• startingPrices

• endingPrices

Also stored this information to tickerIndex assigned

3. Third is another nested loop inside the first nested loop to fetch details for each Index.

4. Last loop is there to store all the collected data into All Stocks Analysis sheet.

Logical Flow

• Users input which year they would like to analyze stock performance.

yearValue = InputBox("What year would you like to run the analysis on?")

• Create and activate an analysis worksheet to keep all information retrieved.

1. All Stocks Analysis sheet is Activated

2. Create a header row

3. tickerIndex are assigned

4. Variables are declared

Worksheets("All Stocks Analysis").Activate

Range("A1").Value = "All Stocks (" + yearValue + ")"

'Create a header row

Cells(3, 1).Value = "Ticker"

Cells(3, 2).Value = "Total Daily Volume"

Cells(3, 3).Value = "Return"

Dim tickers(12) As String

tickers(0) = "AY"

tickers(1) = "CSIQ"

tickers(2) = "DQ"

tickers(3) = "ENPH"

tickers(4) = "FSLR"

tickers(5) = "HASI"

tickers(6) = "JKS"

tickers(7) = "RUN"

tickers(8) = "SEDG"

tickers(9) = "SPWR"

tickers(10) = "TERP"

tickers(11) = "VSLR"

Defining main loop assigning tickerIndex from 0 to 11. Initializing index from zero .

tickerIndex = 0

For tickerIndex = 0 to 11

if meet some criteria then

tickerIndex = tickerIndex + 1

Next tickerIndex

Defined second loop to go through all stocks data.

Worksheets(yearValue).Activate

For J = 2 To RowCount

If Cells(J, 1).Value <> Cells(J - 1, 1).Value Then

tickers(tickerIndex) = Cells(J, 1).Value

startingPrices(tickerIndex) = Cells(J, 6).Value

End If

If Cells(J + 1, 1).Value <> Cells(J, 1).Value Then

endingPrices(tickerIndex) = Cells(J, 6).Value

\*tickerIndex = tickerIndex + 1\*

End If

Next J

Defined second nested loop to fetch next set of data for each stock, then Volume(tickerIndex).

For x = 2 To RowCount

If Cells(x, 1).Value = tickers(tickerIndex) Then

TotalVolume = TotalVolume + Cells(x, 8).Value

End If

Next x

volume(tickerIndex) = TotalVolume

defined last loop for publishing finding into Stocks Analysis sheet analysis Worksheet which created on step 2

Worksheets("Challenge\_All Stocks Anlysis").Activate

For i = 0 To 11

Cells(i + 4, 1).Value = tickers(i)

Cells(i + 4, 3).Value = endingPrices(i) / startingPrices(i) - 1

Cells(4 + i, 2).Value = volume(i)

Next i

Formatting for visual presentation of analysis done

'Formatting

Worksheets("All Stocks Analysis").Activate

Range("A3:C3").Font.FontStyle = "Bold"

Range("A3:C3").Borders(xlEdgeBottom).LineStyle = xlContinuous

Range("B4:B15").NumberFormat = "#,##0"

Range("C4:C15").NumberFormat = "0.0%"

Columns("B").AutoFit

dataRowStart = 4

dataRowEnd = 15

For i = dataRowStart To dataRowEnd

If Cells(i, 3) > 0 Then

Cells(i, 3).Interior.Color = vbGreen

Else

Cells(i, 3).Interior.Color = vbRed

End If