Task: 01 (15th July 2021)

Write a function in Python which takes following as arguments:

1. Array of string for stocks names

2. Array of the price

3. Array of positions. (This means how many we already have)

All 3 arrays will be of same length for a particular run.

Calculate for which stock the value is lowest and for which stock the value is highest.

Return an object (of two values) from the function the name of the stock with highest value as well as the name of the stock with lowest value.

Major Highlights

Three Python lists namely – StockNames, StockPrices, StockPositions have been initialized.

A function according to above specification has been created.

The function successfully returns the highest and lowest valued stock (which we get after multiplying unit price with positions)

Sample Output have been attached after the code. A text file will be sent which contains source code for the same.

Function (without comments)

```
StockNames = ['AAPL','IWM','IBM']
StockPrices = [149.15, 234.54, 175]
StockPositions = [5, 10, 20]

def CheckHighestnLowest(StockNames, StockPrices,
StockPositions):
    StockOrderValue = [Price*Position for Price, Position in
zip(StockPrices,  StockPositions)]
    HighestIndex = StockOrderValue.index(max(StockOrderValue))
    LowestIndex  = StockOrderValue.index(min(StockOrderValue))
    return StockNames[HighestIndex], StockNames[LowestIndex]

HighestValued, LowestValued =
CheckHighestnLowest(StockNames,StockPrices,StockPositions)
```

Source Code (with comments, which was used to get sample outputs).

```
#List containing name of stocks
StockNames = ['AAPL','IWM','IBM']

#List containing Unit Stock Prices
StockPrices = [149.15, 234.54, 175]

#List containing Number of Positions for each stock
StockPositions = [5, 10, 20]

def CheckHighestnLowest(StockNames, StockPrices,
StockPositions):

    #Multiplying corresponding Unit Stock Prices with
Positions to get 'Total Order Value' and storing it in a new
list.
    StockOrderValue = [Price*Position for Price, Position in
zip(StockPrices, StockPositions)]

    #Finding index for the Maximum Value and Minimum Value
Stock from the list.
    HighestIndex = StockOrderValue.index(max(StockOrderValue))
    LowestIndex  = StockOrderValue.index(min(StockOrderValue))

    #We can use this for printing details for the Maximum and
```

```
Minimum Value stock.

    print("Lowest Value Stock in your Portfolio:\nName:
{}\nUnit Stock Price: {}\nTotal Positions: {}\nTotal Order
Value: {}"

.format(StockNames[LowestIndex],StockPrices[LowestIndex],Stock
Positions[LowestIndex],StockOrderValue[LowestIndex]))

    print("\nHighest Value Stock in your Portfolio:\nName:
{}\nUnit Stock Price: {}\nTotal Positions: {}\nTotal Order
Value: {}"

.format(StockNames[HighestIndex],StockPrices[HighestIndex],Sto
ckPositions[HighestIndex],StockOrderValue[HighestIndex]))

    return StockNames[HighestIndex], StockNames[LowestIndex]

print("\nFunction should return a tuple with IBM and
AAPL\n",CheckHighestnLowest(StockNames,StockPrices,StockPositi
ons))
```

Output