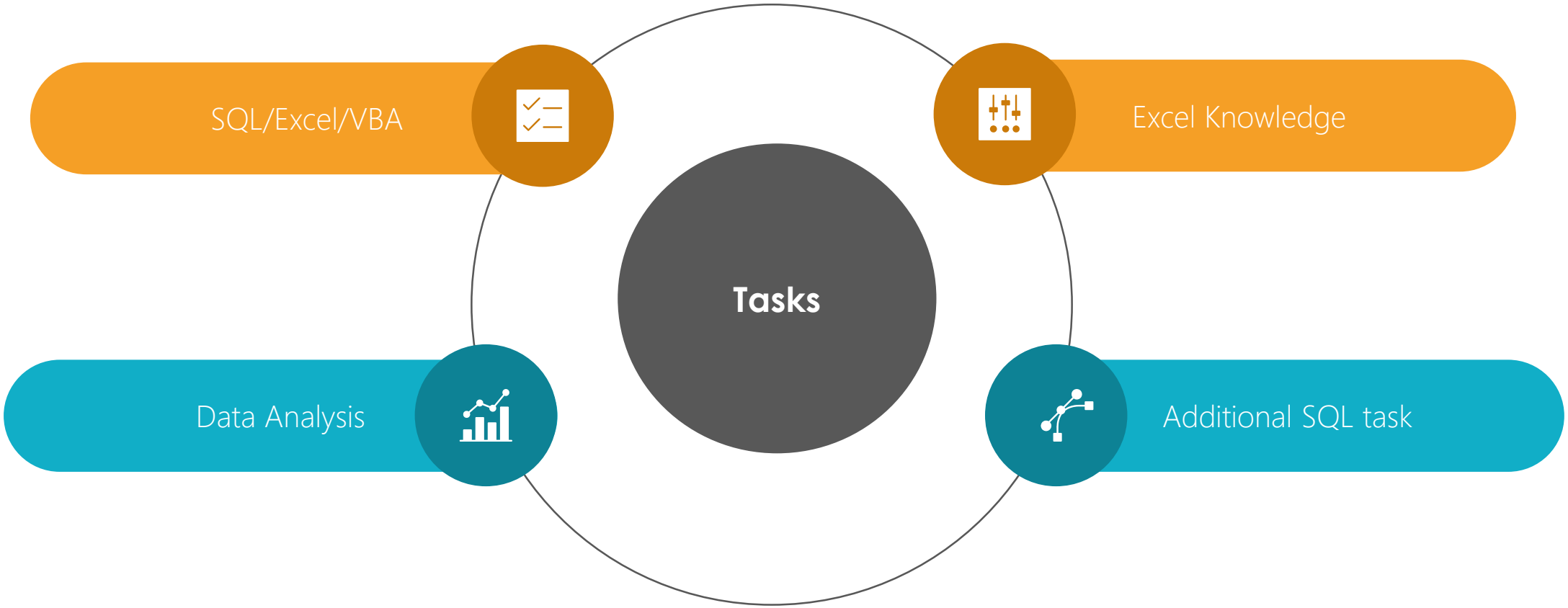
Business Data Analysis

Presentation

Prakhar Srivastava

Tasks


SQL/Excel/VBA
Excel Knowledge
Tasks
Data Analysis
Additional SQL task

Transactions Data Analysis

```
8345;Debit;4342;SE
3138;Debit;5852;SE
5233;Debit;3517;SE
8634;Debit;5325;DK
8076;Credit;4815;SE
5860;Debit;623;SE
5143;Credit;5752;FI
7592;Debit;290;SE
553;Debit;2389;DK
5488;Credit;5655;SE
```

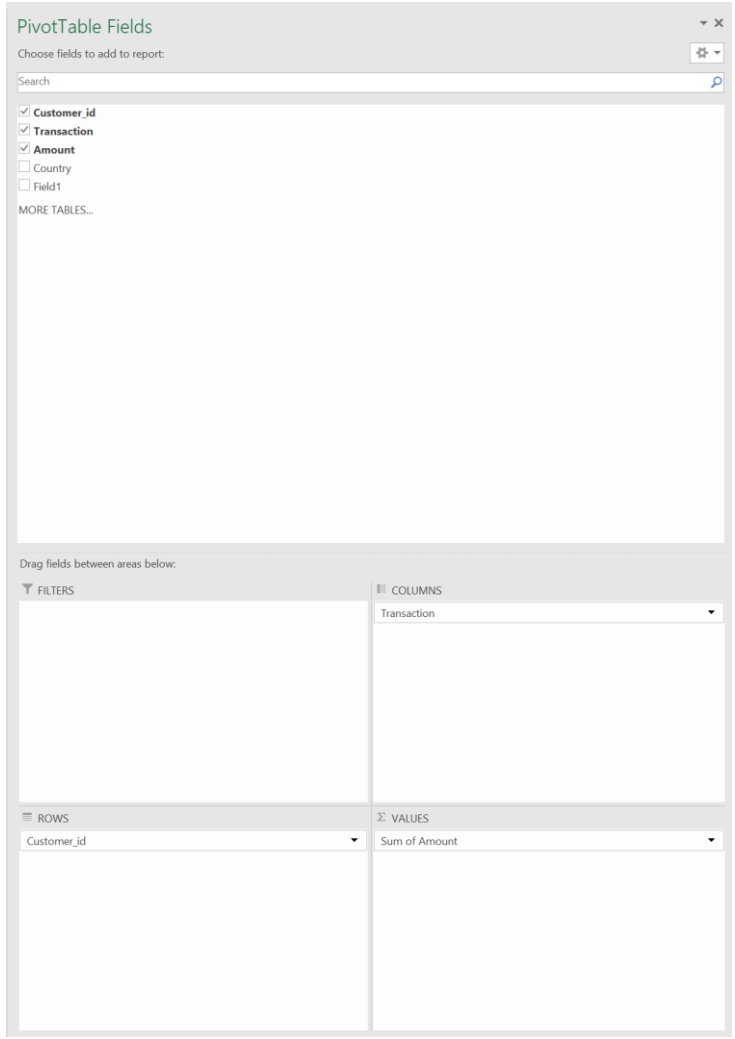
Text file

Txt file is imported into excel and delimiter is set to semicolon ;

	A	B	C	D
1	Customer_	Transactic	Amount	Country
2	8345	Debit	4342	SE
3	3138	Debit	5852	SE
4	5233	Debit	3517	SE
5	8634	Debit	5325	DK
6	8076	Credit	4815	SE
7	5860	Debit	623	SE
8	5143	Credit	5752	FI
9	7592	Debit	290	SE
10	553	Debit	2389	DK
11	5488	Credit	5655	SE

CustomerSegment =IF(D5 > (AVERAGE(D$5:D$10004) + (0.2 * AVERAGE(D$5:D$10004))), "High-spender", IF(D5 < (AVERAGE(D$5:D$10004) - (0.2 * AVERAGE(D$5:D$10004))), "Low-spender", "Medium-spender"))

Customer_id	Debit	Credit	Grand Total	CustomerSegment
0	34679	42490	77169	Medium-spender
1	43973	25248	69221	Medium-spender
10	59939	36989	96928	High-spender
100	27281	53875	81156	Medium-spender
1000	44432	21900	66332	Medium-spender
1001	68151	4499	72650	Medium-spender
1002	54295	48123	102418	High-spender
1003	36330	61566	97896	High-spender
1004	14901	39708	54609	Low-spender
1005	17314	35867	53181	Low-spender
1006	72468	32556	105024	High-spender



D_Q1 =QUARTILE.INC(O5:O2477,1)

D_Q3 =QUARTILE.INC(O5:O2477,3)

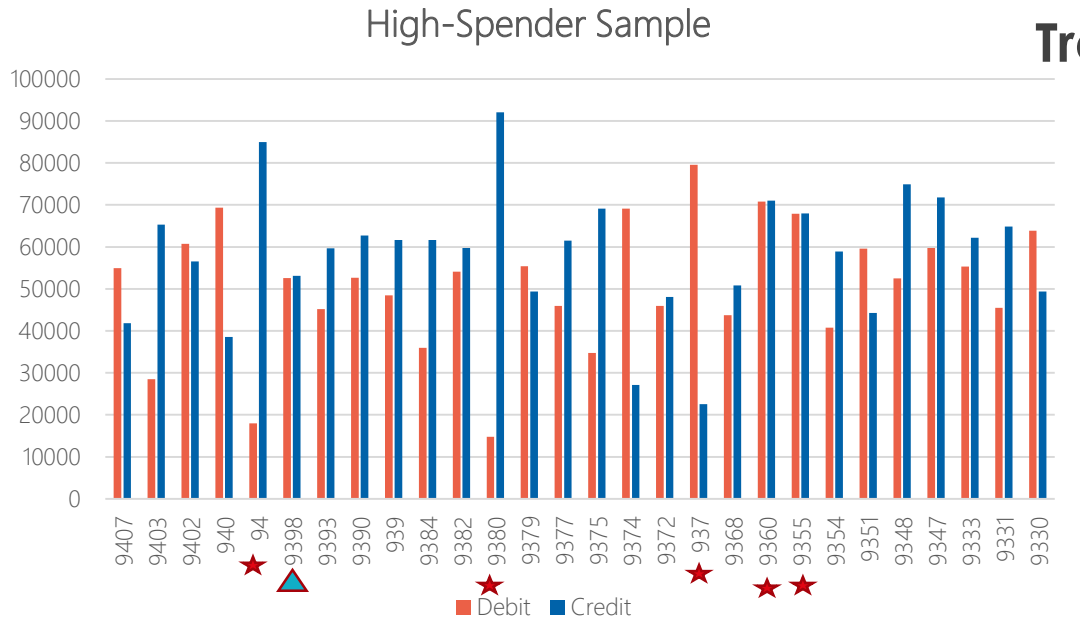
D_IQR =R5-Q5

DebitActivity =IF(ABS(O5-Q5)>S5, "Unusual", "")

Activity =IF(AND(U5="Unusual",Y5="Unusual"),"Suspicious","")

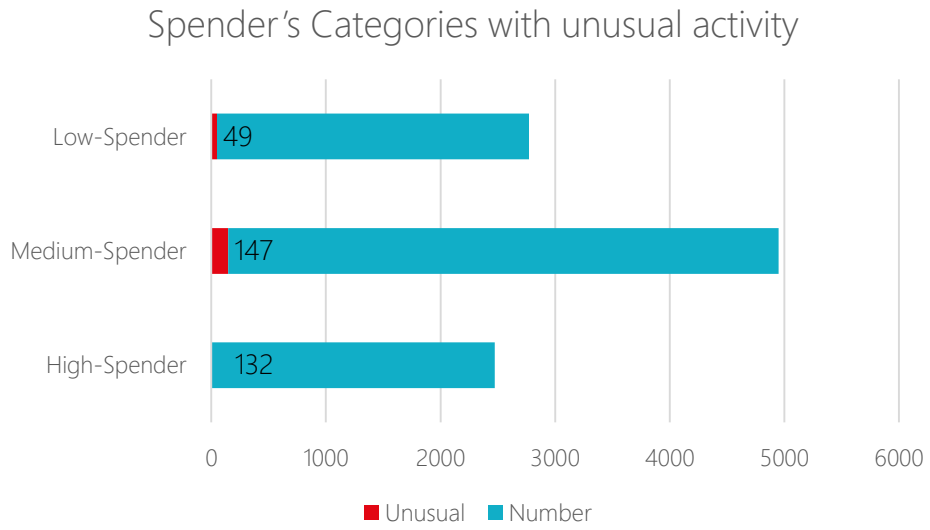
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
Customer_id	Debit	Credit	D_Q1	D_Q3	D_IQR	D_Threshold	DebitActivity	C_Q1	C_Q3	C_IQR	CreditActivity	Activity
10	59939	36989	42991	61631	18640	89591		43654	62504	18850		
9998	64100	42553	42984.5	61632	18647.5	89603.25	Unusual	43669	62512.25	18843.25		
9994	47372	45984	42978	61624	18646	89593		43679	62520.5	18841.5		
9992	27617	81341	42971.5	61627.5	18656	89611.5		43676.5	62528.75	18852.25	Unusual	
9985	66639	33519	42991	61631	18640	89591	Unusual	43674	62504	18830		
9980	48240	44920	42984.5	61620.5	18636	89574.5		43681.5	62512.25	18830.75		
998	61225	37005	42978	61624	18646	89593		43679	62520.5	18841.5		
9979	49171	48339	42971.5	61627.5	18656	89611.5		43685.25	62528.75	18843.5		
9976	57151	35855	42965	61631	18666	89630		43684	62537	18853		
9974	58653	35351	42951	61632	18681	89653.5		43687.75	62539.25	18851.5		
9971	33504	80055	42937	61633	18696	89677		43712	62541.5	18829.5	Unusual	
9964	50735	43944	42971.5	61634	18662.5	89627.75		43700.5	62528.75	18828.25		
9948	79302	23012	42965	61635	18670	89640	Unusual	43689	62537	18848	Unusual	Suspicious
994	33133	62634	42951	61632	18681	89653.5		43723.5	62539.25	18815.75	Unusual	
9936	62120	42996	42978	61633	18655	89615.5	Unusual	43712	62520.5	18808.5		

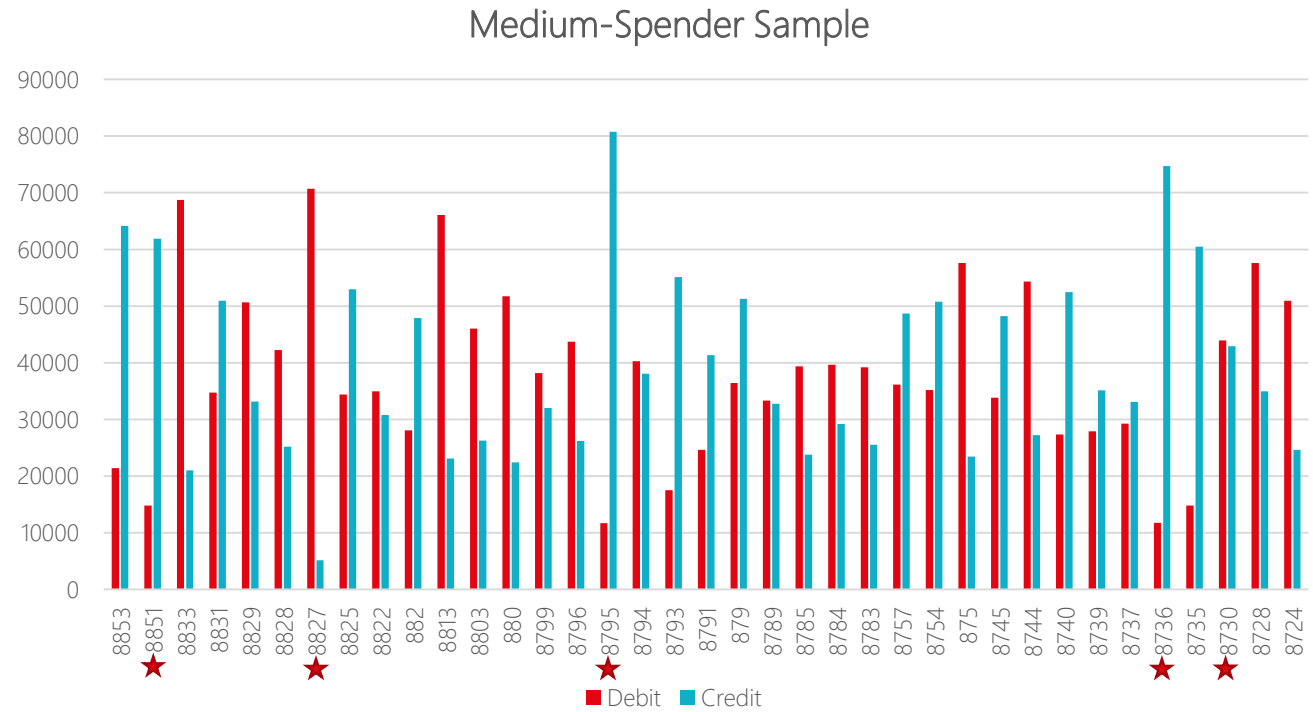
Transactions Data Analysis

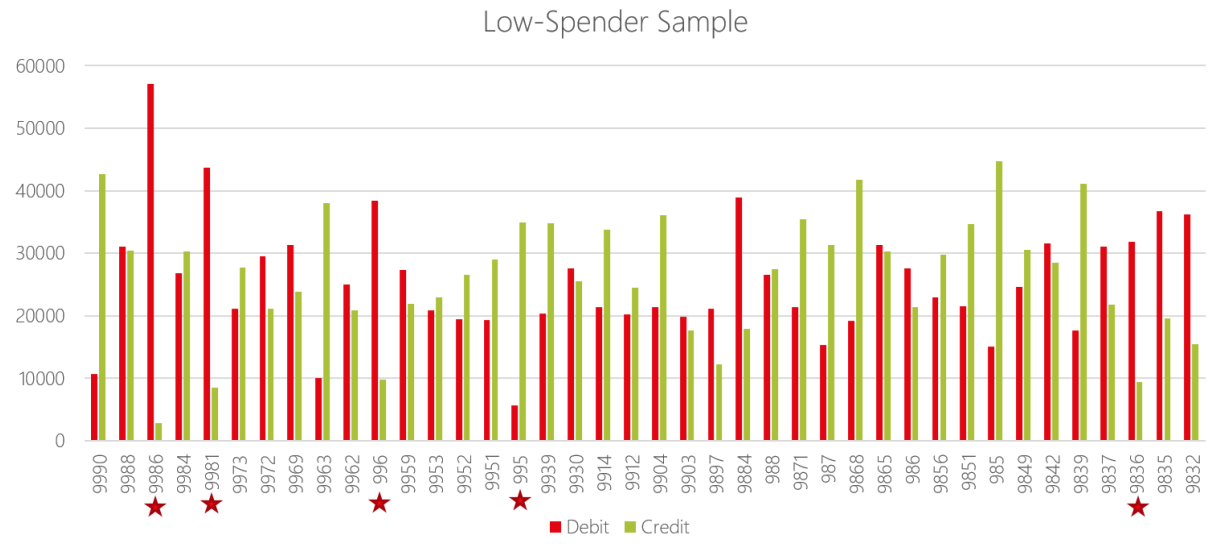


Unusual

New rule







My SQL Skills

Table: loans

loan_id	customer_id	loan_amount	loan_date
1	101	5000	2022-01-01
2	102	8000	2022-02-01
3	103	9000	2022-03-01
4	104	6000	2022-04-01
5	105	7000	2022-05-01
6	106	6000	2022-06-01
7	107	8000	2022-07-01
8	108	9000	2022-08-01
9	109	7000	2022-09-01
10	110	8000	2022-10-01

Table: customers

customer_id	customer_name	customer_address	customer_email	customer_phone
101	John Doe	123 Main St	john.doe@example.com	555-555-5555
102	Jane Doe	456 Elm St	jane.doe@example.com	555-555-5556
103	John Smith	789 Oak St	john.smith@example.com	555-555-5557
104	Jane Smith	246 Pine St	jane.smith@example.com	555-555-5558
105	Bob Johnson	135 Maple St	bob.johnson@example.com	555-555-5559
106	Alice Johnson	678 Cedar St	alice.johnson@example.com	555-555-5560
107	Charlie Brown	246 Birch St	charlie.brown@example.com	555-555-5561
108	Sarah Connor	135 Willow St	sarah.connor@example.com	555-555-5562
109	Mike Ross	678 Maple St	mike.ross@example.com	555-555-5563
110	Rachel Zane	246 Oak St	rachel.zane@example.com	555-555-5564

Total loan amount by customer:

```sql
SELECT
  customers.customer_name,
  SUM(loans.loan_amount) AS total_loan_amount
FROM
  loans
  INNER JOIN customers ON loans.customer_id = customers.customer_id
GROUP BY
  customers.customer_name

```

customer_name	total_loan_amount
Alice Johnson	6000
Bob Johnson	7000
Charlie Brown	8000
Jane Doe	8000
Jane Smith	6000
John Doe	5000
John Smith	9000
Mike Ross	7000
Rachel Zane	8000
Sarah Connor	9000

Total loan per year:

```sql
SELECT
  YEAR(loans.loan_date) AS loan_year,
  SUM(loans.loan_amount) AS total_loan_amount
FROM
  loans
GROUP BY
  YEAR(loans.loan_date)

```

loan_year	total_loan_amount
2022	73000

Top 5 customers with the loan amount:

```sql
SELECT
  customers.customer_name,
  SUM(loans.loan_amount) AS total_loan_amount
FROM
  loans
  INNER JOIN customers ON loans.customer_id = customers.customer_id
GROUP BY
  customers.customer_name
ORDER BY
  total_loan_amount DESC
LIMIT 5
```

customer_name	total_loan_amount
John Smith	9000
Sarah Connor	9000
Rachel Zane	8000
Charlie Brown	8000
Jane Doe	8000

Number of loans per customer:

```sql
SELECT
  customers.customer_name,
  COUNT(loans.loan_id) AS loan_count
FROM
  loans
  INNER JOIN customers ON loans.customer_id = customers.customer_id
GROUP BY
  customers.customer_name

```

customer_name	loan_count
Alice Johnson	1
Bob Johnson	1
Charlie Brown	1
Jane Doe	1
Jane Smith	1
John Doe	1
John Smith	1
Mike Ross	1
Rachel Zane	1
Sarah Connor	1

Customers who have taken out loan in March:

```sql
SELECT customers.customer_name, customers.customer_email
FROM customers
INNER JOIN loans
ON customers.customer_id = loans.customer_id
WHERE MONTH(loans.loan_date) = 3;
```

customer_name	customer_email
John Smith	john.smith@example.com

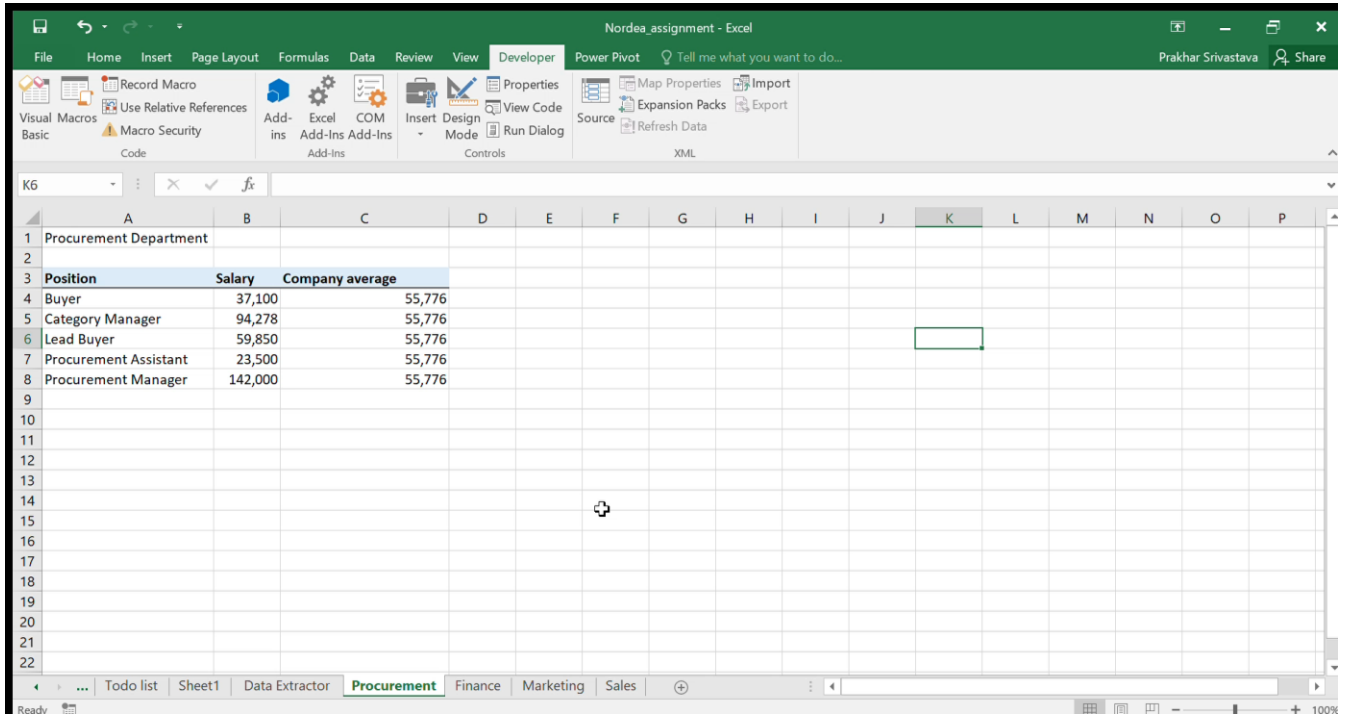
Macros

Automating repetative graph building task using Macros recording

Nordea_assignment.xlsm - Module4 (Code)

(General) | Macro5

```
Sub Macro5()
'
' Macro5 Macro
'
' Keyboard Shortcut: Ctrl+n
'
    Range("A3").Select
    Range(Selection, Selection.End(xlDown)).Select
    Range(Selection, Selection.End(xlToRight)).Select
    ActiveSheet.Shapes.AddChart2(322, xlColumnClustered).Select
    ActiveChart.FullSeriesCollection(1).ChartType = xlColumnClustered
    ActiveChart.FullSeriesCollection(2).ChartType = xlLine
    ActiveChart.ClearToMatchStyle
    ActiveChart.ChartStyle = 328
End Sub
```



Excel/VBA

Extracting data and header into another sheet with a single click using VBA

Nordea_assignment.xlsm - Module1 (Code)

(General) | doTask

```
Sub extract()
    'extract selected cells + header in to a new worksheet
    Dim newWorksheet As Worksheet
    Dim currentSheet As Worksheet
    Dim pickedData As Range

    Set pickedData = Selection

    Set currentSheet = ActiveSheet
    Set newWorksheet = Sheets.Add

    pickedData.Copy
    newWorksheet.Range("B3").PasteSpecial (xlPasteAll)

    currentSheet.Range("C3:G3").Copy
    newWorksheet.Range("B2").PasteSpecial (xlPasteAll)
    newWorksheet.Range("B2").PasteSpecial (xlPasteColumnWidths)


End Sub
```

Nordea_assignment - Excel

Name	Gender	Department	Start Date	Salary
Ernst Backson	Male	Research and Development	26-Dec-03	$37,185
Sheelagh Sanger	Male	Product Management	4-Jul-08	$72,300
Ichabod Bracco	Male	Human Resources	2-Sep-10	$56,135
Welsh Boodell	Female	Engineering	3-Jul-08	$117,875
Letta Philippon	Male	Accounting	6-May-06	$86,155
Nessy Whitloe	Male	Human Resources	20-Apr-12	$98,595
Katrinka Hazeldine	Male	Engineering	25-Mar-14	$62,560
Fiona Menicomb	Male	Support	12-Oct-05	$47,520
Salim Embleton	Male	Human Resources	17-Feb-09	$96,615
Emmaline Jecks	Male	Sales	17-May-06	$37,810
Brenn Lovegrove	Female	Legal	7-Mar-09	$57,465
Wendel Fawkes	Female	Services	18-Feb-15	$83,245
Shelia Spencers	Female	Training	17-May-04	$54,915

Extract

Macros-demo | Todo list | Data Extractor

VBA code explained

This VBA code takes values from a range of cells and uses them to update the data labels on a chart.

```
Sub Code_A()
```
Its the name of the macro

```
Dim RiskDataSeries As Series
```
Series object

```
Dim SingleCell As Range
```
Range object

```
Dim RiskList As Range
```
Range object

```
Dim RiskCounter As Integer
```
Interger

```
RiskCounter = 1
```
This line sets the value of "RiskCounter" to 1

```
Set RiskList = Range("c3", "c18")
```
This line sets the value of the "RiskList" variable to a range of cells C3 to C18.

```
Set RiskDataSeries = ActiveSheet.ChartObjects("Chart 2").Chart.SeriesCollection(1)
```
"RiskDataSeries" to the second series(index1)in the chart named "Chart 2"

```
RiskDataSeries.HasDataLabels = True
```
enables data labels to be displayed on the chart

```
For Each SingleCell In RiskList
```
a loop that will iterate over each cell in the "RiskList" range

```
RiskDataSeries.Points(RiskCounter).DataLabel.Text = SingleCell.Value
```
updates the text of the data label to the value of the current cell in the loop

```
RiskCounter = RiskCounter + 1
```
increments the value

```
Next SingleCell
```
end of the loop

```
End Sub
```

VBA code explained

This VBA code copies rows of data from two different worksheets, "ProductA" and "ProductB", and pastes them into a third worksheet, "Summary"

```
Sub Code_B()
```
Its the name of the macro

```
Dim SheetA As Worksheet, SheetSum As Worksheet, LR As Long, RNG As Range
```
four variables are declared

```
Set SheetA = Sheets("ProductA")
```
Reference to the worksheet

```
Set SheetSum = Sheets("Summary")
```
Reference to the worksheet

```
LR = SheetA.Cells(Rows.Count, 2).End(xlUp).Row
```
This line sets the LR variable to the last non-empty row in column 2 (B) of the SheetA worksheet. It uses the Rows.Count property to get the total number of rows in the worksheet, and the xlUp constant to find the last non-empty cell in column 2 (B).

```
Set RNG = SheetA.Range("A4:A" & LR)
```
reference the range of cells in column A of SheetA from row 4 to the last non-empty row

```
RNG.EntireRow.Copy SheetSum.Cells(Rows.Count, 1).End(xlUp)(2)
```
This line copies the entire row of data for each cell in the RNG range and pastes it into the next empty row at the bottom of column 1 (A) in the SheetSum worksheet

```
Dim SheetB As Worksheet
Set SheetB = Sheets("ProductB")
```
These two lines declare a new variable called SheetB of type Worksheet and set it to reference the worksheet named "ProductB".

```
LR = SheetB.Cells(Rows.Count, 2).End(xlUp).Row
Set RNG = SheetB.Range("A4:A" & LR)
```
These two lines set the LR variable to the last non-empty row in column 2 (B) of the SheetB worksheet, and set the RNG variable to reference the range of cells in column A of SheetB from row 4 to the last non-empty row.

```
RNG.EntireRow.Copy SheetSum.Cells(Rows.Count, 1).End(xlUp)(2)
```
This line copies the entire row of data for each cell in the RNG range and pastes it into the next empty row at the bottom of column 1 (A) in the SheetSum worksheet.

```
End Sub
```

Additional SQL tasks

WORKER_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
1	Monika	Arora	100000	2014-02-20 09:00:00	HR
2	Niharika	Verma	80000	2014-06-11 09:00:00	Admin
3	Vishal	Singhal	300000	2014-02-20 09:00:00	HR
4	Amitabh	Singh	500000	2014-02-20 09:00:00	Admin
5	Vivek	Bhati	500000	2014-06-11 09:00:00	Admin
6	Vipul	Diwan	200000	2014-06-11 09:00:00	Account
7	Satish	Kumar	75000	2014-01-20 09:00:00	Account
8	Geetika	Chauhan	90000	2014-04-11 09:00:00	Admin

worker

WORKER_REF_ID	WORKER_TITLE	AFFECTED_FROM
1	Manager	2016-02-20 00:00:00
2	Executive	2016-06-11 00:00:00
8	Executive	2016-06-11 00:00:00
5	Manager	2016-06-11 00:00:00
4	Asst. Manager	2016-06-11 00:00:00
7	Executive	2016-06-11 00:00:00
6	Lead	2016-06-11 00:00:00
3	Lead	2016-06-11 00:00:00

table2

WORKER_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
1	Monika	Arora	100000	2014-02-20 09:00:00	HR
2	Niharika	Verma	80000	2014-06-11 09:00:00	Admin
3	Vishal	Singhal	300000	2014-02-20 09:00:00	HR
4	Amitabh	Singh	500000	2014-02-20 09:00:00	Admin
5	Vivek	Bhati	500000	2014-06-11 09:00:00	Admin
6	Vipul	Diwan	200000	2014-06-11 09:00:00	Account
7	Satish	Kumar	75000	2014-01-20 09:00:00	Account
8	Geetika	Chauhan	90000	2014-04-11 09:00:00	Admin

worker

WORKER_REF_ID	WORKER_TITLE	AFFECTED_FROM
1	Manager	2016-02-20 00:00:00
2	Executive	2016-06-11 00:00:00
8	Executive	2016-06-11 00:00:00
5	Manager	2016-06-11 00:00:00
4	Asst. Manager	2016-06-11 00:00:00
7	Executive	2016-06-11 00:00:00
6	Lead	2016-06-11 00:00:00
3	Lead	2016-06-11 00:00:00

table2

Query to fetch the names of workers who earn the highest salary

```
1 SELECT First_name, Last_name, Salary
2 FROM worker
3 WHERE Salary = (SELECT MAX(Salary) FROM worker)
```

First_name	Last_name	Salary
Amitabh	Singh	500000
Vivek	Bhati	500000

WORKER_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
1	Monika	Arora	100000	2014-02-20 09:00:00	HR
2	Niharika	Verma	80000	2014-06-11 09:00:00	Admin
3	Vishal	Singhal	300000	2014-02-20 09:00:00	HR
4	Amitabh	Singh	500000	2014-02-20 09:00:00	Admin
5	Vivek	Bhati	500000	2014-06-11 09:00:00	Admin
6	Vipul	Diwan	200000	2014-06-11 09:00:00	Account
7	Satish	Kumar	75000	2014-01-20 09:00:00	Account
8	Geetika	Chauhan	90000	2014-04-11 09:00:00	Admin

worker

WORKER_REF_ID	WORKER_TITLE	AFFECTED_FROM
1	Manager	2016-02-20 00:00:00
2	Executive	2016-06-11 00:00:00
8	Executive	2016-06-11 00:00:00
5	Manager	2016-06-11 00:00:00
4	Asst. Manager	2016-06-11 00:00:00
7	Executive	2016-06-11 00:00:00
6	Lead	2016-06-11 00:00:00
3	Lead	2016-06-11 00:00:00

table2

Query to fetch departments along with the total salaries paid for each of them.

```
1 SELECT Department, SUM(Salary) as Total_Salary
2 FROM worker
3 GROUP BY Department
```

Department	Total_Salary
Account	775000
Admin	670000
HR	400000

WORKER_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
1	Monika	Arora	100000	2014-02-20 09:00:00	HR
2	Niharika	Verma	80000	2014-06-11 09:00:00	Admin
3	Vishal	Singhal	300000	2014-02-20 09:00:00	HR
4	Amitabh	Singh	500000	2014-02-20 09:00:00	Admin
5	Vivek	Bhati	500000	2014-06-11 09:00:00	Admin
6	Vipul	Diwan	200000	2014-06-11 09:00:00	Account
7	Satish	Kumar	75000	2014-01-20 09:00:00	Account
8	Geetika	Chauhan	90000	2014-04-11 09:00:00	Admin

worker

WORKER_REF_ID	WORKER_TITLE	AFFECTED_FROM
1	Manager	2016-02-20 00:00:00
2	Executive	2016-06-11 00:00:00
8	Executive	2016-06-11 00:00:00
5	Manager	2016-06-11 00:00:00
4	Asst. Manager	2016-06-11 00:00:00
7	Executive	2016-06-11 00:00:00
6	Lead	2016-06-11 00:00:00
3	Lead	2016-06-11 00:00:00

table2

Query to print the name of employees having the highest salary in each department

```sql
SELECT Department, First_name, Last_name, Salary
FROM worker w1
WHERE Salary =
  (SELECT MAX(Salary) FROM worker w2 WHERE w1.Department = w2.Department)
GROUP BY Department, First_name, Last_name, Salary;

```

Department	First_name	Last_name	Salary
Account	Vivek	Bhati	500000
Admin	Amitabh	Singh	500000
HR	Vishal	Singhal	300000

WORKER_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
1	Monika	Arora	100000	2014-02-20 09:00:00	HR
2	Niharika	Verma	80000	2014-06-11 09:00:00	Admin
3	Vishal	Singhal	300000	2014-02-20 09:00:00	HR
4	Amitabh	Singh	500000	2014-02-20 09:00:00	Admin
5	Vivek	Bhati	500000	2014-06-11 09:00:00	Admin
6	Vipul	Diwan	200000	2014-06-11 09:00:00	Account
7	Satish	Kumar	75000	2014-01-20 09:00:00	Account
8	Geetika	Chauhan	90000	2014-04-11 09:00:00	Admin

worker

WORKER_REF_ID	WORKER_TITLE	AFFECTED_FROM
1	Manager	2016-02-20 00:00:00
2	Executive	2016-06-11 00:00:00
8	Executive	2016-06-11 00:00:00
5	Manager	2016-06-11 00:00:00
4	Asst. Manager	2016-06-11 00:00:00
7	Executive	2016-06-11 00:00:00
6	Lead	2016-06-11 00:00:00
3	Lead	2016-06-11 00:00:00

table2

Query to fetch the departments that have less than five people in it

```
SELECT Department
FROM
  (SELECT Department, COUNT(*) as num_workers
   FROM worker
   GROUP BY Department) as subquery
WHERE num_workers < 5;
```

Department
Account
Admin
HR

WORKER_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
1	Monika	Arora	100000	2014-02-20 09:00:00	HR
2	Niharika	Verma	80000	2014-06-11 09:00:00	Admin
3	Vishal	Singhal	300000	2014-02-20 09:00:00	HR
4	Amitabh	Singh	500000	2014-02-20 09:00:00	Admin
5	Vivek	Bhati	500000	2014-06-11 09:00:00	Admin
6	Vipul	Diwan	200000	2014-06-11 09:00:00	Account
7	Satish	Kumar	75000	2014-01-20 09:00:00	Account
8	Geetika	Chauhan	90000	2014-04-11 09:00:00	Admin

worker

WORKER_REF_ID	WORKER_TITLE	AFFECTED_FROM
1	Manager	2016-02-20 00:00:00
2	Executive	2016-06-11 00:00:00
8	Executive	2016-06-11 00:00:00
5	Manager	2016-06-11 00:00:00
4	Asst. Manager	2016-06-11 00:00:00
7	Executive	2016-06-11 00:00:00
6	Lead	2016-06-11 00:00:00
3	Lead	2016-06-11 00:00:00

table2

Query to print details of the Workers whose FIRST_NAME ends with ‘h’ and contains six alphabets

```sql
SELECT *
FROM worker
WHERE LENGTH(First_name) = 6 AND Right(First_name, 1) = 'h';

```

Worker_id	First_name	Last_name	Salary	Joining_date	Department
7	Satish	Kumar	75000	2014-01-20T09:00:00Z	Account

WORKER_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
1	Monika	Arora	100000	2014-02-20 09:00:00	HR
2	Niharika	Verma	80000	2014-06-11 09:00:00	Admin
3	Vishal	Singhal	300000	2014-02-20 09:00:00	HR
4	Amitabh	Singh	500000	2014-02-20 09:00:00	Admin
5	Vivek	Bhati	500000	2014-06-11 09:00:00	Admin
6	Vipul	Diwan	200000	2014-06-11 09:00:00	Account
7	Satish	Kumar	75000	2014-01-20 09:00:00	Account
8	Geetika	Chauhan	90000	2014-04-11 09:00:00	Admin

worker

WORKER_REF_ID	WORKER_TITLE	AFFECTED_FROM
1	Manager	2016-02-20 00:00:00
2	Executive	2016-06-11 00:00:00
8	Executive	2016-06-11 00:00:00
5	Manager	2016-06-11 00:00:00
4	Asst. Manager	2016-06-11 00:00:00
7	Executive	2016-06-11 00:00:00
6	Lead	2016-06-11 00:00:00
3	Lead	2016-06-11 00:00:00

table2

Query that fetches the unique values of DEPARTMENT from Worker table and prints its length

```sql
SELECT department, COUNT(*) as Number_of_Workers
FROM worker
GROUP BY department;
```

department	Number_of_Workers
Account	3
Admin	3
HR	2

WORKER_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
1	Monika	Arora	100000	2014-02-20 09:00:00	HR
2	Niharika	Verma	80000	2014-06-11 09:00:00	Admin
3	Vishal	Singhal	300000	2014-02-20 09:00:00	HR
4	Amitabh	Singh	500000	2014-02-20 09:00:00	Admin
5	Vivek	Bhati	500000	2014-06-11 09:00:00	Admin
6	Vipul	Diwan	200000	2014-06-11 09:00:00	Account
7	Satish	Kumar	75000	2014-01-20 09:00:00	Account
8	Geetika	Chauhan	90000	2014-04-11 09:00:00	Admin

worker

WORKER_REF_ID	WORKER_TITLE	AFFECTED_FROM
1	Manager	2016-02-20 00:00:00
2	Executive	2016-06-11 00:00:00
8	Executive	2016-06-11 00:00:00
5	Manager	2016-06-11 00:00:00
4	Asst. Manager	2016-06-11 00:00:00
7	Executive	2016-06-11 00:00:00
6	Lead	2016-06-11 00:00:00
3	Lead	2016-06-11 00:00:00

table2

Query to print details of the Workers who are also Managers

```sql
SELECT w.*
FROM worker w
JOIN table2 t2 ON w.Worker_id = t2.Worker_ref_id
WHERE t2.Worker_title = 'Manager';
```

Worker_id	First_name	Last_name	Salary	Joining_date	Department
1	Monika	Arora	100000	2014-02-20T09:00:00Z	HR
5	Vivek	Bhati	500000	2014-06-11T09:00:00Z	Account

Excel Knowledge

03 Excel Knowledge

Thank You