

SKILL JOURNAL

Enrollment Number – 2019BTCS088 Year of Enrollment – 2019

Name of the Student - <u>YASH GUPTA</u>

School of <u>COMPUTER SCIENCE & INFORMATION TECHNOLOGY</u>

Program – B. TECH

Specialization/ Branch - <u>CS&IT</u>

 $Semester - \underline{4}^{TH} \hspace{1cm} Section - \underline{B2} \hspace{1cm} Branch - \underline{CS\&IT}$

Paper Code – <u>BTCS04CF01</u> Name of Paper – <u>Business Processes & MIS in BFSI</u>

Faculty-In-Charge – <u>AMRITA CHAURRASIA MAM</u>

CERTIFICATE

THE SKILL EXPERIMENTS ENTERED IN THIS JOURNAL HAVE BEEN SATISFACTORY PERFORMED BY

ENROLLMENT NO - 2019BTCS088 MR/MS YASH GUPTA
STUDYING IN PROGRAM B. TECH BRANCH CS&IT IN
SCHOOL OF COMPUTER SCIENCE & INFORMATION
TECHNOLOGY

DURING SEMESTER $\underline{\mathbf{4}}^{\mathsf{TH}}$ OF ACADEMIC YEAR $\underline{2020-2021}$

(Faculty in charge))
Date:	

INDEX

S.NO	Title of Skill Activity	Date of Allocation	Date of Submission	Sign of Faculty
1.	Creating Pivot Chart in MS-Excel	June 09 th , 2021	June 30 th , 2021	
2.	Implementation of Slicer in MS-Excel	June 10 th , 2021	June 30 th , 2021	
3.	Importing Data into MS-Excel	June 19 th , 2021	June 30 th , 2021	
4.	Creating Dropdown- list in MS-Excel via VLOOKUP & Data Validation	June 23 rd , 2021	June 30 th , 2021	
5.	Creating Data Cube in MS-Excel	June 24 th , 2021	June 30 th , 2021	

SKILL ACTIVITIY NO: 1

Date: June 09th, 2021

```
Title: Creating Pivot Chart in MS-Excel
               white but on skills ACTIVITY-DE pringles to make the in
       Title: Creating Pivot Chart in Ms-Excel
       1. What is the purpose of this Activity? (Explain in 3-4 lines)
The purpose of this activity is to create a perof table in Ms-Excel.
            A pivot table allower you to extract the significance from a large.
             detailed data set.
             Following use cases can be softed by Pfvot Table:
                          . a. Sost information by category earlies.
                         b. Compare information is seconds.
                           . C. Time savey
                          d. Interactive Data Analysis
           2. Liters performed in this Activity. (Explain in 5-6 lines)
                 Steps parformed to sneet a privot Table. -
                 * step O: Wick any single cell inside the datoset.
                 ( Step 2): On the sneed Tab, in the Tables group, click Pivot Table.
                   Step : Excel automatically selects the data for you. The default
                              location for a New pivot table is New Worksheet.
                               click OK. Then to get the total amount exported of
                               each product, drag the following fields to the different
                               areas: _ ra. Product field to the Rows area.
                   LA Step @:
                                        b. Amount field to the Yaluus onea.
                                       C. Country freed to the Fitters area.
     1/2 Dimensional step : If you do ag a freld to the Rowe area & columns area Proof Table.
                              you can create a two-dimensional privot table.
                                First, somet a prot table. Next, toget the total
                               amount exposted to each country, of each presduct
     2 Privot Table 3
                               drag the following spelds to the different areas.
                                1. country field to the Rows area.
                                2. Product field to the columns ones.
                                 3. Amount field to the values area.
                                 4. category field to the Filter area.
```

- What resources equipments took and you we for this activity?
 - O. Microsoft Excel (version 2105)

 - b. Laptop/ computer.
- 4. What skills did you acquire?
 - a. Integet to know How Pivot Table works (Behlud the seems called a. Integet to know How Pivot Table works (Behlud the seems called a country FS (), Sumiss () &
 - b. How to create 20 Table pivot chart?
- c. Realworld we cave of pivot chart in his data analyses
- 5. Time taken to complete this activity? DR:00 (HOURS)

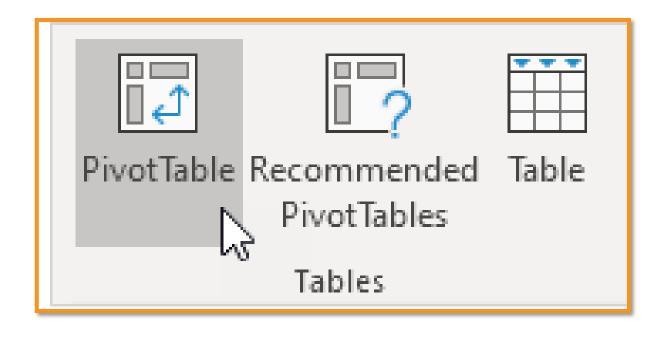
Signature of Student

Details of the Activity:

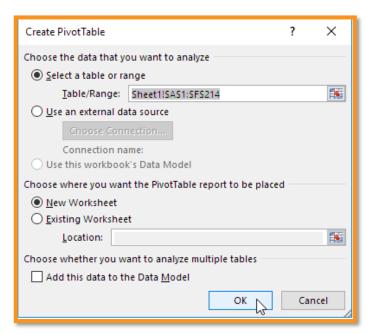
DATASET IN MS-EXCEL:

	Α	В	С	D	Е	F	G	Н
1	Order ID	Product	Category	Amount	Date	Country		
2	1	Carrots	Vegetables	\$4,270	1/6/2016	United States		
3	2	Broccoli	Vegetables	\$8,239	1/7/2016	United Kingdom		
4	3	Banana	Fruit	\$617	1/8/2016	United States		
5	4	Banana	Fruit	\$8,384	1/10/2016	Canada		
6	5	Beans	Vegetables	\$2,626	1/10/2016	Germany		
7	6	Orange	Fruit	\$3,610	1/11/2016	United States		
8	7	Broccoli	Vegetables	\$9,062	1/11/2016	Australia		
9	8	Banana	Fruit	\$6,906	1/16/2016	New Zealand		
10	9	Apple	Fruit	\$2,417	1/16/2016	France		

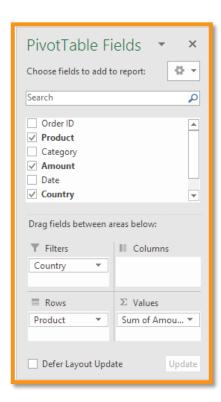
INSERT A PIVOT TABLE:



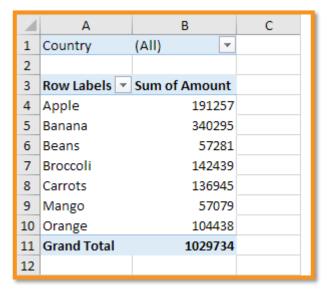
INSERT A PIVOT TABLE:



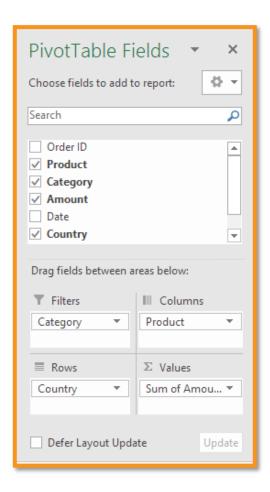
SELECTING FIELDS:



PIVOT TABLE:



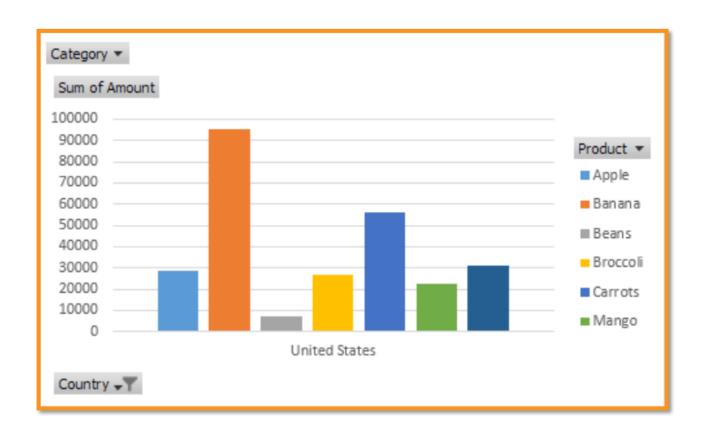
CATEGORISING FIELDS TO FILTER AREA FOR 2D CHART:



2-DIMENSIONAL PIVOT TABLE:

	Α	В	С	D	Е	F	G	Н	1	J
1	Category	(AII)								
2										
3	Sum of Amount	Column 💌								
4	Row Labels 🔻	Apple	Banana	Beans	Broccoli	Carrots	Mango	Orange	Grand Total	
5	Australia	20634	52721	14433	17953	8106	9186	8680	131713	
6	Canada	24867	33775		12407		3767	19929	94745	
7	France	80193	36094	680	5341	9104	7388	2256	141056	
8	Germany	9082	39686	29905	37197	21636	8775	8887	155168	
9	New Zealand	10332	40050		4390			12010	66782	
10	United Kingdom	17534	42908	5100	38436	41815	5600	21744	173137	
11	United States	28615	95061	7163	26715	56284	22363	30932	267133	
12	Grand Total	191257	340295	57281	142439	136945	57079	104438	1029734	
13										

PIVOT CHART WITH DYNAMIC X FIELD:



(To be filled by Faculty)

Sr. No.	Skill /Competencies	(Achieved / Not Achieved) (Yes / No)
Remarks:		
Total mark	out of 10.	
		Signature of Faculty
		Date:

SKILL ACTIVITIY NO: 2

Date: June 10th, 2021

Title: Implementation of Slicer in MS-Excel SKILL-ACTIVITY-02 Title: Implementation of silcer in Ms-Excel (Explain in 3-4 lines) The purpose of this octivity is to implement sticen in the pivol-Table or s. What is the powepose of this activity? any regular table in Mc-Excel. The add silvers to regular Excel tables for performing auto-filter, & filter, operation on our table data. Frially, 94% an add-on toof for pivotTable, so that data analysts/scientists/ engineers can visualize data very easily & able to make most occurate brediction. We can see multiple slices to multiple privat tables to coast ausseme 2. Steps performed in this activity. (Explain in 5-6 lines) For snewing a silvey in a privotrable, we will execute the Step @: Godo Open your Microsoft Excel. Select a Blank worksheet. Go to sowert tab. linder somet Tab, click any cell inside proof table. I we assume that you already have I pivot → Step ③: On the Analyze Tab 9: In the Fitter acoup, click Insert slicet. table to your wasksheet } Step 2: Step 9: Wick "Atlanta" to find out which pocoducts we emposit 11 doubling **FIRS** Conclusion: Both Apple & Peach one the main export slicer poseduct to the Atlanta. The report fitter (cell 84) & step 6: Insent second allow, so elick any cell enside privat table. Ustapa: On the Analyze tab , in the Filter group, wick insert stices. 115meeting second * Atap®! Level the alleer. On the options told, in the alicer styles check stem and click ok. SIRCET Ato. We the socond slicer. ell'ul the mutti-select button to solect multiple perfectitiff Etems. NOTE: Instead of using Mult-solect multiple Hens.

Im eset a second privol Table. To connect both already . step @: to this pivot take, we -

La. Aelect the fixt silcer . on the options teen, in the silver Group . click Report Connections.

step (1): select the second prooftable & eleck OK. Then aimply repeat the 10th step for the second stices. Use toth stices as they will indicate the correlation (between each other)

Sateple: wich the from in the upper-right cosner of assion to

- 3. What tools | recequipments | materials did you use for this activity? a. Microsoft Exect (version 2205)

 - c. Daraset from excel-easy.com website.

 - a. We get to know How toutilize privat table by using streets) b. Undertand the Need of Allieus to make, awatome data analysis What skills did you acquire?

 - reposts (via use of Multi-Select sifeer button) c. Implementation of sitcer in usexcel & solving readwood use case
 - 5. Time taken to complete this activity? 02:00 (HOURS)

Yguptil

(To be filled by Faculty)

Sr. No.	Skill /Competencies	(Achieved / Not Achieved) (Yes / No)
Remarks:		
Total mark	out of 10.	
		Signature of Faculty
		Date:

Details of the Activity:

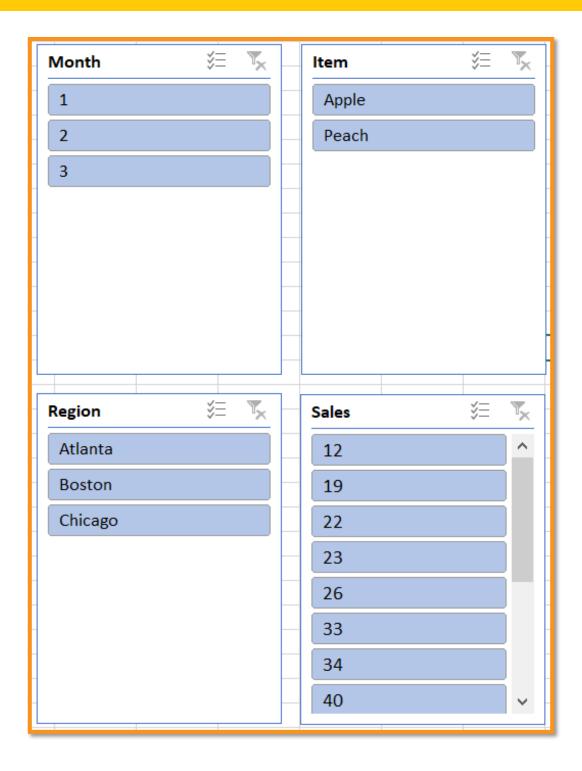
USE OF SLICER FUNCTION IN MS-EXCEL:

Month		Region	Item	Sales
	1	Atlanta	Apple	19
	1	Boston	Apple	34
	1	Chicago	Apple	12
	2	Atlanta	Apple	26
	2	Boston	Apple	40
	2	Chicago	Apple	22
	3	Atlanta	Apple	50
	3	Boston	Peach	60
	3	Chicago	Peach	33
	1	Atlanta	Peach	99
	1	Boston	Peach	43
	1	Chicago	Peach	33
	2	Atlanta	Peach	77
	2	Boston	Peach	40
	2	Chicago	Peach	23
	3	Atlanta	Peach	33
	3	Boston	Peach	33
	3	Chicago	Peach	19

SUMMARIZED DATA TABLE OF OUR DATASET:

Month	(All)	*			
Sum of Sales	Column	Labels 🔻			
Row Labels 🔻	Atlanta		Boston	Chicago	Grand Total
Apple		95	74	34	203
Peach		209	176	108	493
Grand Total		304	250	142	696

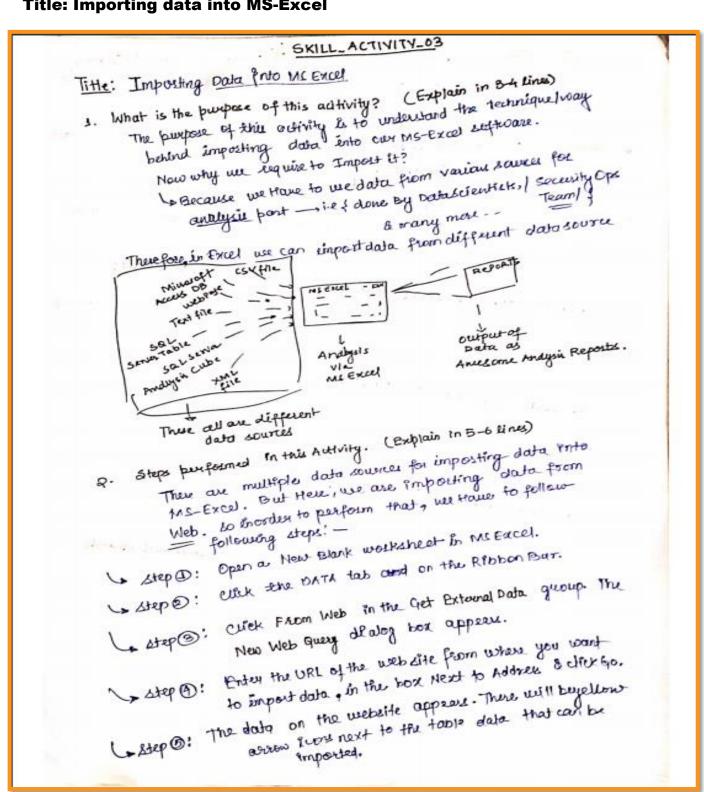
USE OF SLICER FUNCTION IN MS-EXCEL:



SKILL ACTIVITIY NO: 3

Date: June 19th, 2021

Title: Importing data into MS-Excel



Step 6: CLBA the yellow icons to delect the data we want to impost. This twent the yellow feeds to green bores with a enecknown os shown in the &s.

Click on the Import button after you have selected what nee want. > Step 10: Then the Import Data , box appears.

► Step®: Specify where we want to save the data and then click OK.

→ Atep 9: For better representation, arrange the data for further analysis andles presentation.

3. What took requirements materials did you use for this activity?

a. Microsoft excel (version 2105)

b. Laptop (computer from inters: // www. man.com/en-us / money

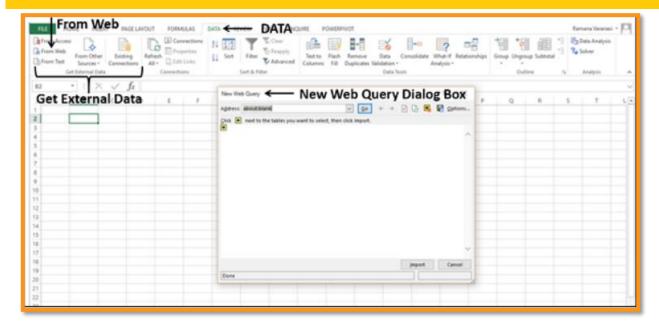
a. Why we need to import Data sources are those ? 4. What skilk did you acquire? 6. Hour many kind of Data coubies exethere? c. Way to Proport Date into Ms-Excel d. Imposting data the from web Porto MS-Excel. 5. Time taken by this activity? 02:00 (HOURS)

(To be filled by Faculty)

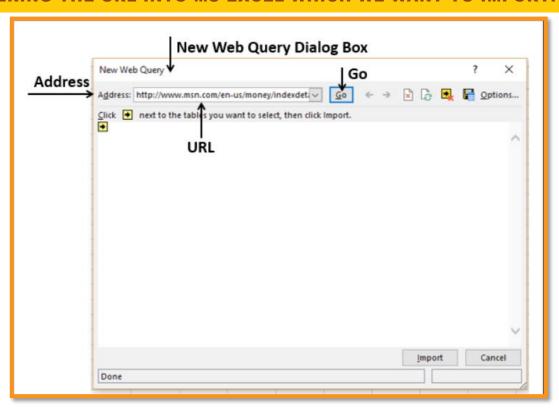
Sr. No.	Skill /Competencies	(Achieved / Not Achieved) (Yes / No)
Remarks:		
Total mark	out of 10.	
		Signature of Faculty
		Date:

Details of Activity

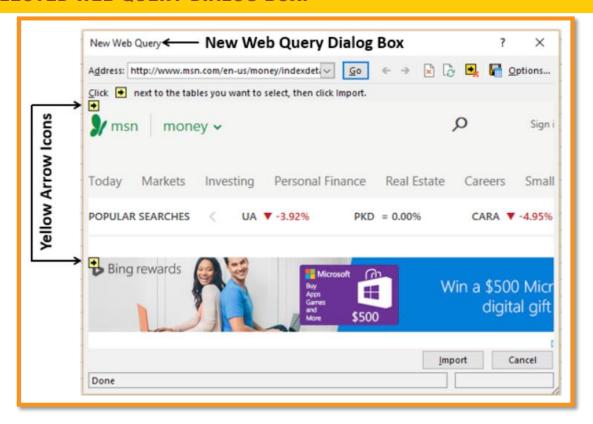
IMPORTING DATA FROM WEB IN MS-EXCEL:



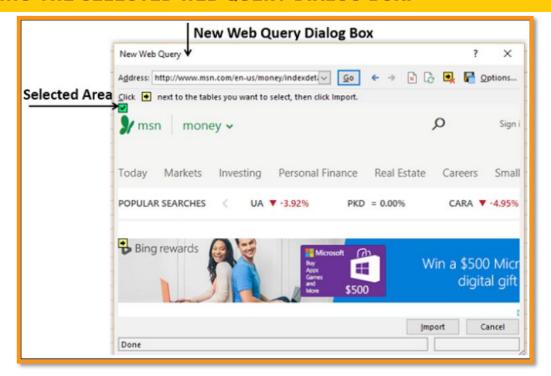
ENTERING THE URL INTO MS-EXCEL WHICH WE WANT TO IMPORT:



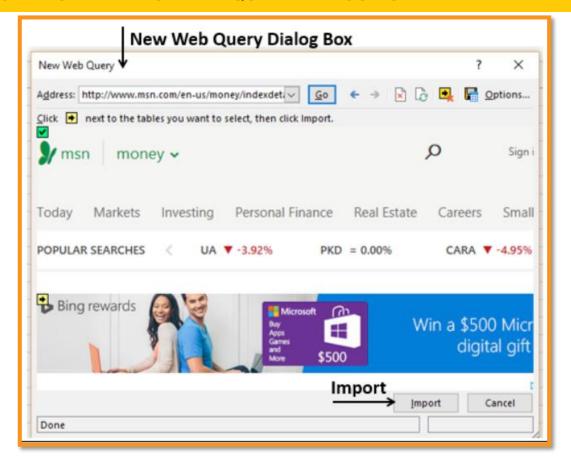
SELECTED WEB QUERY DIALOG BOX:



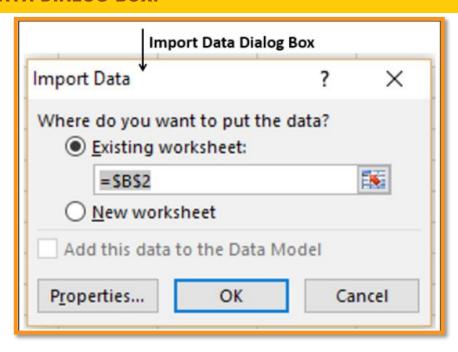
TICKING THE SELECTED WEB QUERY DIALOG BOX:



IMPORTING DATA FROM WEB QUERY DIALOG BOX:



IMPORT DATA DIALOG BOX:



STOCK MARKET DATA IMPORTED SUCCESSFULLY INTO MS-EXCEL:

4	А В	С	D	Ε	F	G	Н
1							
2	NASDAQ						
3	4,952.25						
4	A						
5	4.2						
6	0.08%						
7	Largest Con	nponent	s (By Marke	t Cap)			
8							
9	AAPL						
10	Apple Inc						
11	▼ 98.46						
12	-1.4						
13	-1.40%						
14	29.17M						
15	39.21M (Av	g)					
16	98.33-99.54						
17	89.47-132.9	7					
18	539.31B						
19	10.98						
20							
21	GOOGL						
22	Alphabet In	ıc					
23	▼ 748.46						

SKILL ACTIVITIY NO: 4

Date: June 23rd, 2021

Title: Creating Dropdown-list in MS-Excel via VLOOKUP & performing Data Validation

	SKILL ACTIVITY-04
Title	Co eating Dropdown-Met In MS-Excep via VLOOKUP & performing Data
	>1-1/delich
	of this activity? (Emplain in 3-4 cities) VLOOKUP
1.	Validation. What is the purpose of this activity? (Emplain in 3-4 lines) What is the purpose of this activity? I to create disoperation also via using VLOOKUP
	The parter of the parter Vallation = 10000 M Information
	and their implementaly is used for eaching a preceding datal
	Now, VLOOKUP() in excel a some corresponding
	Now, VLOOKUP() in excel is used for exoking a preceding data! In a table or data set & extracting some corresponding data!
	in a table the vicolup () says to excel: - information, the vicolup () says to excel: - in tayman terms, the vicolup () says to excel: - in tayman terms, the vicolup () says to excel: - in tayman terms, the vicolup () says to excel: - in tayman terms, the vicolup () says to excel: - in tayman terms, the vicolup () says to excel: - in tayman terms, the vicolup () says to excel: - in tayman terms, the vicolup () says to excel: - in tayman terms, the vicolup () says to excel: - in tayman terms, the vicolup () says to excel: - in tayman terms, the vicolup () says to excel: - in tayman terms, the vicolup () says to excel: - in tayman terms, the vicolup () says to excel: - in tayman terms, the vicolup () says to excel: - in tayman terms, the vicolup () says to excel: - in tayman terms, the vicolup () says to excel: - in tayman terms, the vicolup () says to excel: - in tayman terms, the vicolup () says to excel: - in tayman terms, the vicolup () says to excel: - in tayman terms, the vicolup () says to excel: - in tayman terms, the vicolup () says to excel: - in tayman terms, the vicolup () says to excel: - in tayman terms, the vicolup () says to excel: - in tayman terms, the vicolup () says to excel: - in tayman terms, the vicolup () says to excell () says to
	some the VLOOINP () and the balance
	In tayman terms, and this brece of in forme bome corrections
	In tayman terms, the VLODIEDP () tags barrance of tayman from this prece of in formation Leg. barrance of corresponding dataset (a table) and tell me some barrance). ?? dataset (a table) and tell me some barrance). ??
	dataset (a about Pt (8)
	In tayman felms, ee book for this prece of information bome conserpouncy ee book for this prece of information and tell me bome conserpouncy dataset (a table) and tell me bome conserpouncy tage of bananat). Information about it (eg: price of bananat).
	Formula of VLOOKUP: - (lookup-value, table-array, col-mont)
	Formula of VLOOKUP (lookup-value)
	semilar inguments (Argument)
	Formula of VLODKUP: - VLODKUP: - VLODKUP: - VLODKUP: - VLODKUP: - VLODKUP (lookup-value, table-array, col-lindex-num, [range_looked]) Required Programment (Argument) Argument) Steps benformed for to effectively use the VLOOKUP () so to effectively use the function.
	Explain in 5-band (2) is to
	Steps benformed for this Activity vicoscop: use the VLOOKUP () to steps benformed for to effectively use the VLOOKUP () to steps benformed for to effectively use the VLOOKUP () to steps benformed for sure our data is well organized to surtable for make sure our data is well organized to surtable for make sure our data.
2.	Steps beeformed to effect organized to see the
	Step 0: The toss our data is ween
	make sure function. using the function. using the Data
	Step @: In this step we tell EXCEL what to and then select the cell typing the formula = YLDOKUP (" and then select the cell typing the formula" = YLDOKUP (" and then select the cell that contains et Bananas". That contains the information we want to lookup) In this case, that contains et Bananas?
	typing the formation we want to
	bank the granting
	that contacts that contacts
	that contains the information we manage? That contains et Bananas? Pt's the cell that contains et Bananas? The data le located &
	That contains That the cell that contains The the cell that contains The the cell that contains The the function what to lookup The the function what to look the data is located a Let the function what to look in the located a The feel of the partions step. The first particular to the look in the Table.
	In this step, the setmon common
	tell Excel to search in the regions step. Tell the function where to look in the Table. Le Tell the function where to look in the Table.
	to the table.
	the function where
	L+ Tell "

In this step, we need to tell Excel which column that data * Atera: that we want to have as an output from the Vicokup. To do thu, Excel Needs a Number that come conserponds to the column Number in the table. → Tell Excel what column to output the data from 4 Step 6: Exact The final Step 1s to tell Excel of you are looking for an exact approximate match by entering (True? of "false" in the formula. 5 To find exact or appropriate Match tools/ equipments/ materials did you use for this activity? a. Microsoft Excel (Version 2105) C. Dataset downloaded from www.ablebik.com, b. haptop 1 computer @ Steps performed for DATA Validation Step O: Open the data Validation Dialog box. Shops: Select one of more cells to validate. Go to the DATA tab > Data Tools group & then click Data Valldation button On the sutings tab, elefore the validation exteria according Step (3: Create an Excel Valldation Rule: to our Needs. We can previde 3 things as orgument: coll refrences Value → Step®: Add an Input message (optional)

of we want to duplay a menage that explains to the uses what data. Is allowed in a given cell, open the Input Meuage tab.

Step 1. Display an everage about (optional) In adultion to the input menage, you can show many everse atents when invaled data is enterted for a cell.

4. What skilk did you acquire?

a. Get to know what's the purpose of VLOOKUP why we need It? where to use It?

b. All detalls regarding usage of <u>vicokup</u> & the argument types in NS-Excel

c. What is pata validation? why we need it? When to use & where to use it?

d. How to perform Date validation in MS-Excel? two get to undustands

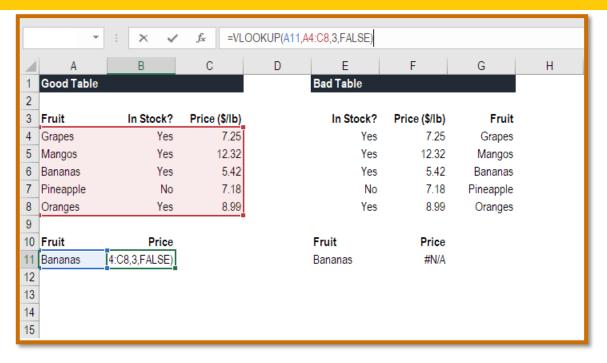
5. Time taken to complete this activity? 62:00 (Hours)

Signature of Student

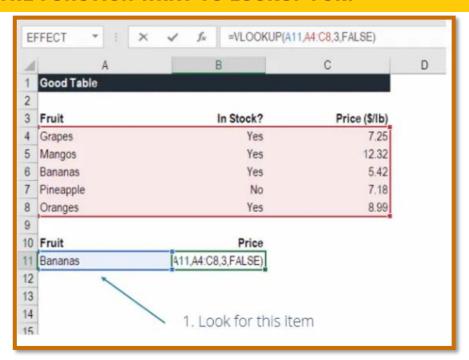
Details of Activity:

1. VLOOKUP

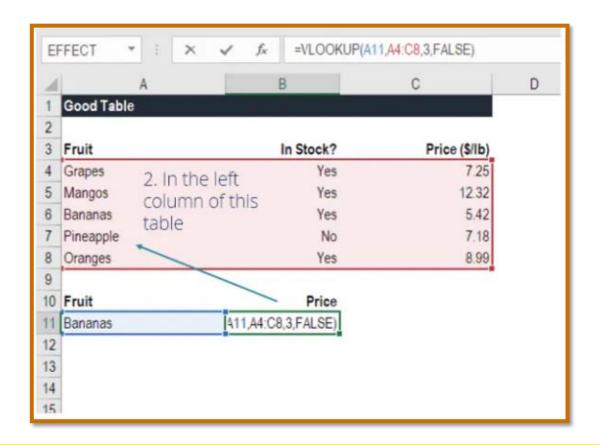
ORGANISING OUR DATA IN MS-EXCEL:



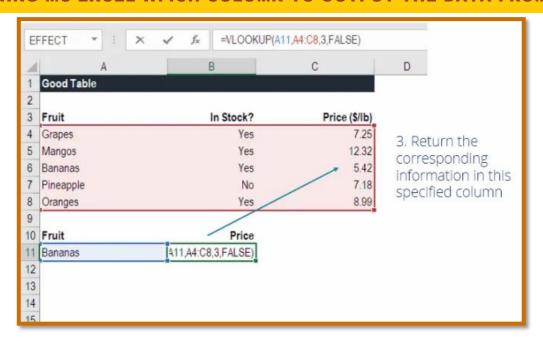
TELLING THE FUNCTION WHAT TO LOOKUP FOR:



SELECTING THE FUNCTION WHERE TO LOOK:

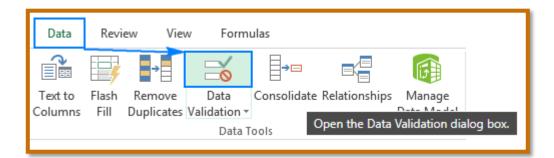


DEFINING MS-EXCEL WFICH COLUMN TO OUTPUT THE DATA FROM:

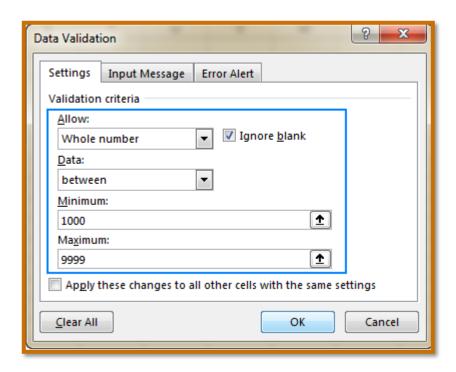


2. DATA VALIDATION:

OPENING THE DATA VALIDATION DIALOG BOX:



CREATE AN EXCEL VALIDATION RULE:



(To be filled by Faculty)

Sr. No.	Skill /Competencies	(Achieved / Not Achieved) (Yes / No)
Remarks:		
Total mark	out of 10.	
		Signature of Faculty
		Date:

SKILL ACTIVITIY NO: 5

Date: June 24th, 2021

Title: Creating OLAP Data Cube in MS-Excel

```
SKILL ACTIVITY-05 14 : ...
    Title: Creating DLAP Data Cube in MC-Eacel
1. What is the purpose of this activity? (Explain in 3-4 lines)
         The presepose of this activity to is to create Online Analytical Processing
         (OLAP) dato cubes with the help of MC-Excel.
         Now, a data cube is helpful in connecting to the data waveflowe
             to remere data so that we can very early manipulate 8+ by
              using Mc-Excel in a tabular faction. When it is opened a o'data
     cube & prosented ax a worksheet containing a Brank Fivot Table
          For Example: If a person Had sale data from 2000 to 2010 that the
                     wanted to organize by punchase amounts an OLAP cube
                     would organize the information into much more
                     Helpful graphs tetables.
  2. Steps performed to this activity. (Explain in 4-5 lines)
             Before building the data cube en excel let us take :-
            Costepo: Create a pivol table from our maindatachect. or
1/37 you ____ Step @ Scleet the ee Data , option at the top of the page followed the patasheet, step @ Scleet the ee Data , pivot chart Report?
don't Have before defined) Then delect " External Data source" be fore
          Atep @ Then press "Get Data" which will open the
         Step @ L Now, select the program from the elect in which
                         your data of located. It could be Microsoft
                       Excel, wood, Accom/ web/ Text file of another breagam
                       that is used to store data.
       Step @: Create fact table by selecting all the field values
                    as the fetter and selling other parameters as well.
        > Step 19: Select the parameters we want to set as dimensions
                     as of the data cube as the filler.
```

Step 18: Copy and those stables and paste them as platume teolating them to the specific boint to form a cube.

Lostepo: Allign all the dimensions and fact tables preoperly to form our final data cube in MS-Excel.

Steps: To make the data work with Excel, solect "save, a who file containing all of the data for the cube". Press "Finish" to end the creation of own OLAP whe.

3. What Resources/ equipments/tools did you use fourthis activity? a. Microsoft Excel (version 2105)

C. Datasheet for Dato cube - https:// Hatill works.com

4. What skells ded you acquere?

a. Get to know about what why, when where to use OLAP? b. Need of OLAP TOLONIC Relational databases problems

e. suregration of proof Table with OIAP Pri order to oreate Data Cube c. Oreation of Data Cube in Excel. d. what we need Data Cube, where to me it?

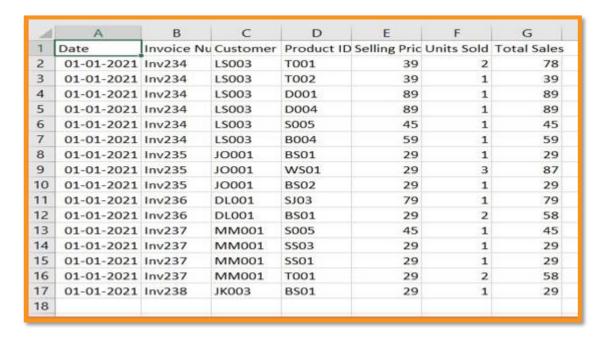
5. Time taken to complete this activity? 02:00 (HOURS)

· Ergnature of Student

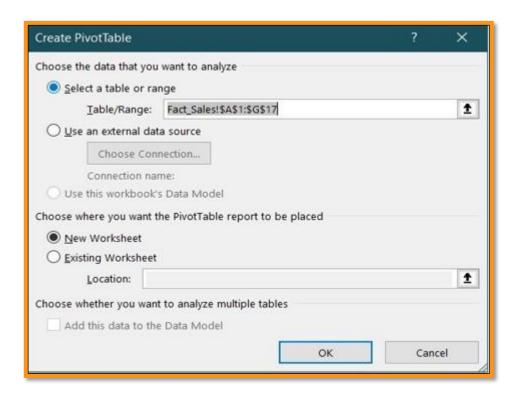
(To be filled by Faculty)

Sr. No.	Skill /Competencies	(Achieved / Not Achieved) (Yes / No)
Remarks:		
Total mark	out of 10.	
		Signature of Faculty
		Date:

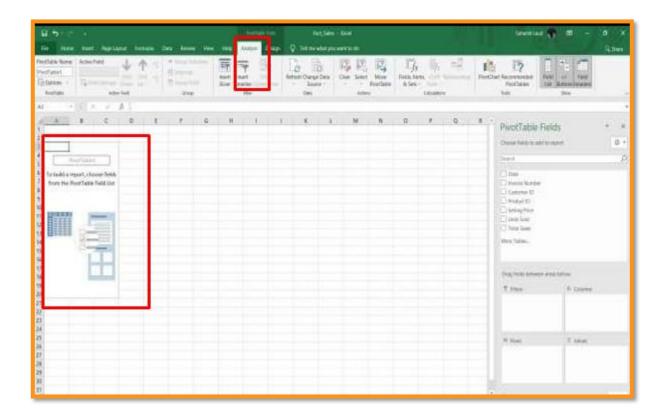
OUR DATASHEET IN MS-EXCEL:



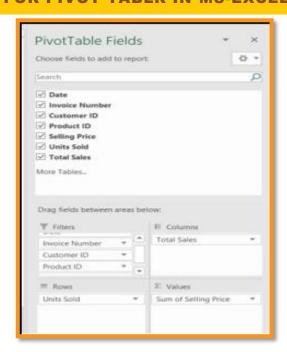
CREATING A PIVOT TABLE:



PIVOT TABLE CREATED IN MS-EXCEL:



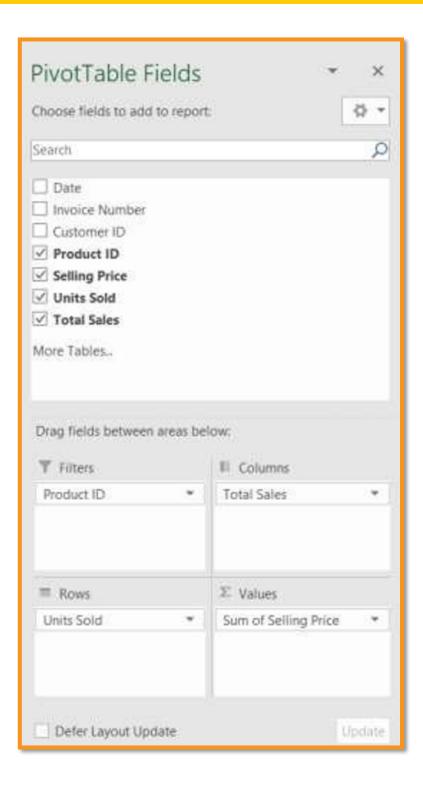
SELECTING FIELDS FOR PIVOT TABLR IN MS-EXCEL:



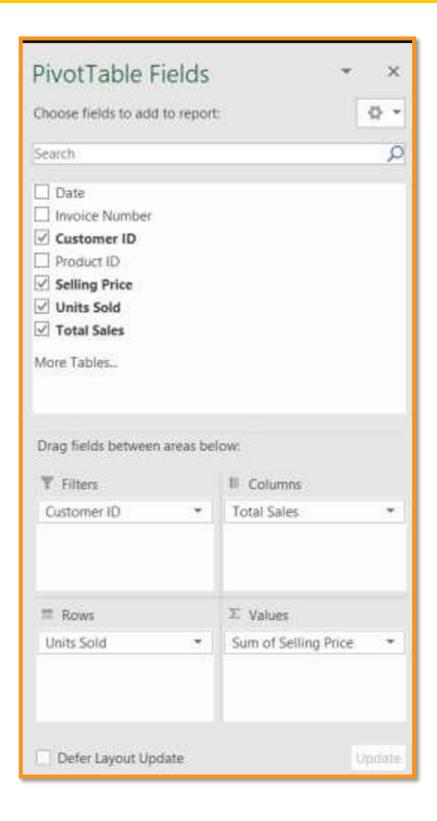
PIVOT FACT TABLE CREATED IN MS-EXCEL:

1	A	В		D	E	F	G	Н	
1	Date	(All)							
2	Total Sales	(AII)							
3	Product ID	(AII)							
4	Invoice Number	(All)							
5	Customer ID	(All)							
6									
7	Sum of Total Sale:	Column Labels *							
8	Row Labels	25	39	45	59	79	89	Grand Tota	
9	1	145	39	90	59	79	178	590	
10	2	110	78	3				194	
11	3	87						87	
12	Grand Total	348	117	90	59	79	178	871	
13									
14		Fact Table							
15									

SELECTING FIELDS FOR PIVOT FACT TABLE 1 IN MS-EXCEL:



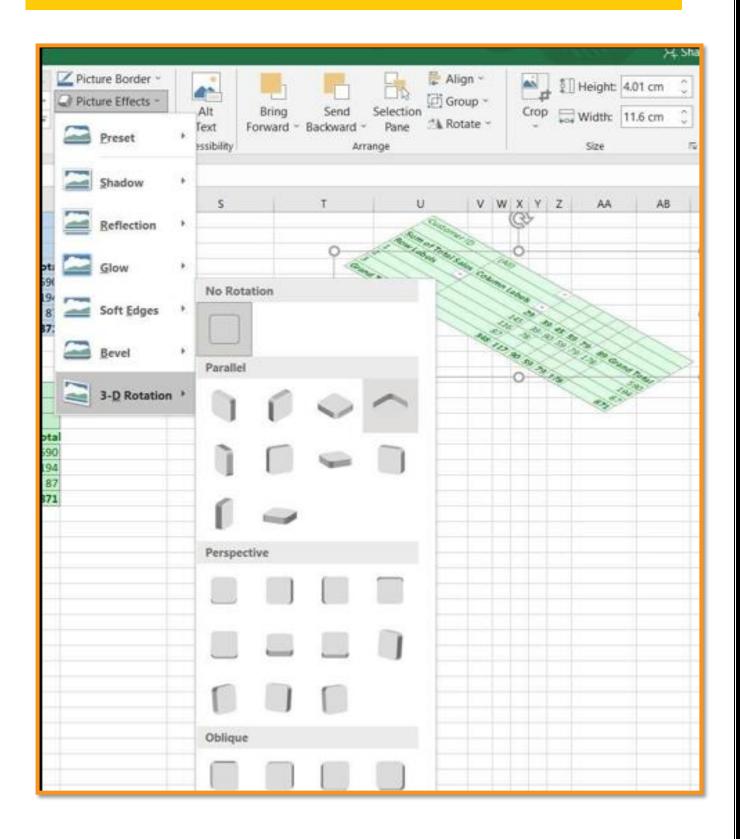
SELECTING FIELDS FOR PIVOT FACT TABLE 2 IN MS-EXCEL:



BOTH PIVOT FACT TABLE CREATED IN MS-EXCEL:

-			-		100	U		4
Product ID	(AII)	v						
sum of Total Sales	Column Labels							
Row Labels 💌		29	39	45	59	79	89	Grand Total
L	1	45	39	90	59	79	178	590
2	116		78					194
3	87							87
Grand Total	348		117	90	59	79	178	871
	Dimension Table	e 1						
Customer ID	(AII)	۳						
Sum of Total Sales	Column Labels	۳						
Row Labels		29	39	45	59	79	89	Grand Total
1	145 116 87		39	90	59	79	178	590 194 87
2			78					
3								
Grand Total	3	48	117	90	59	79	178	871
	Dimension Table	≥ 2						

ROTATING OUR PIVOT TABLE IN MS-EXCEL:



FINAL DATA CUBE IN MS-EXCEL:

