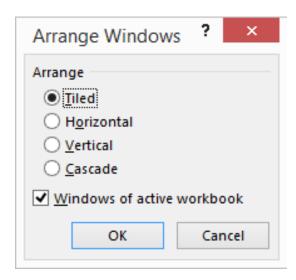
<u>Program 8:</u> Working with Multiple Sheets: work with multiple sheets within a workbook is crucial for organizing and managing data perform complex calculations and create comprehensive reports.

Step 1

- Open your workbook in Excel.
- Click on the New Window button for every worksheet we want to view in that workbook.



- In each new window, click on the tab of the worksheet we want to view.
 Once the worksheets are displayed, click on the Arrange All button in the View window
 - In the following dialog, select our arrangement view. Ensure that we put a check in the Windows of active workbook option.



Step 2:

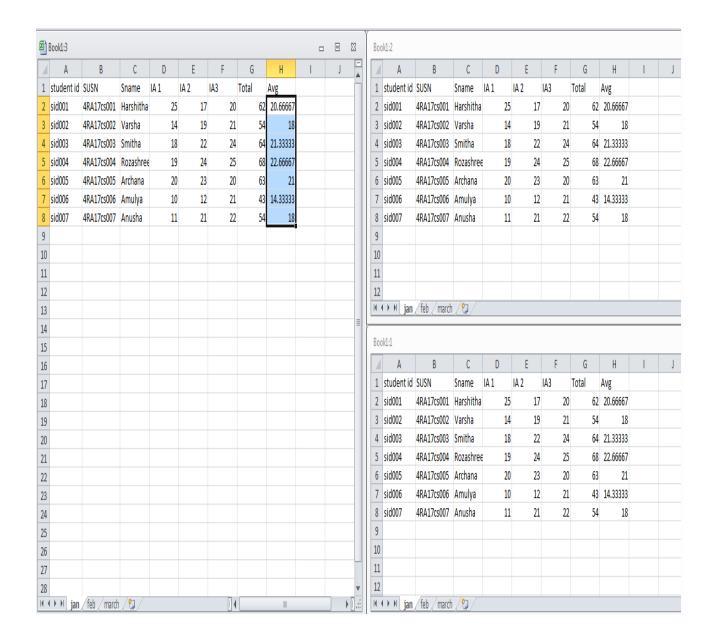
• This is another simple tip that may go unnoticed. Because the scrollbar at the bottom hogs all the space at the bottom of our window, the number of worksheet tabs we can see is limited, when we have more than 3 worksheets.



• To view more, simply over the 3 dots at the left of the scrollbar. Then click and drag it to the right. We'll instantly start seeing more of our worksheet tabs displayed.

Step 3:

- In Excel, working with our worksheets as a single group is a quicker way for applying formulas and formatting across worksheets with the same formatting. Click on the first worksheet tab you wish to edit.
- Then Click + **CTRL** (for non-adjacent worksheet tabs) or Click + **Shift** (for adjacent worksheets) on the other worksheet tabs to add it to the group.



<u>Program 9:</u> Create worksheet with following fields: Empno, Ename, Basic Pay(BP), Travelling Allowance(TA), Dearness Allowance(DA), House Rent Allowance(HRA), Income Tax(IT), Provident Fund(PF), Net Pay(NP). Use appropriate formulas to calculate the above scenario. Analyze the data using appropriate chart and report the data.

<u>Step1:</u> Create employee salary sheet with the following fields. Empno, Ename, Basic Pay(BP), Travelling Allowance(TA), Dearness Allowance(DA), House Rent Allowance(HRA), Income Tax(IT), Provident Fund(PF), Net Pay(NP).

| / | A | В | С | D | E | F | G | Н | | J |
|---|--------|----------|-----------|--------------------------|------------------------|---------------------------|--------------------|-------------|---------------|----------------|
| 1 | Emp no | Emp Name | Basic Pay | Travelling Allowance(TA) | Dearness Allowance(DA) | House Rent Allowance(HRA) | Provident Fund(PF) | Net Pay(NP) | Annual Salary | Income Tax(IT) |

Step2: Fill all the fields with appropriate values.(at least for 10 employee)

| Δ | Α | В | С |
|----------|--------|----------|-----------|
| 1 | Emp no | Emp Name | Basic Pay |
| 2 | CS001 | Gopal | 25000 |
| 3 | CS002 | Krishna | 23000 |
| 4 | CS003 | Mohan | 18000 |
| 5 | CS004 | Radhe | 15000 |
| 6 | CS005 | Shantha | 14000 |
| 7 | CS006 | Naresh | 24000 |
| 8 | CS007 | Murari | 16000 |
| 9 | CS008 | Nayana | 30000 |
| LO | CS009 | Navya | 40000 |
| 11 | CS010 | Manjula | 28000 |

<u>Step3:</u> To calculate Travelling Allowance(TA), Dearness Allowance(DA), House Rent Allowance(HRA) use the following formula.

i) If Basic pay of the employee is greater than or equal to 20000, give 20% from his/her Basic pay other else Basic pay is greater than or equal to 15000, give 15% else give 10% from his/her Basic pay.

TA = BP>=20000, BP*20%, BP>=15000, BP*15%,BP*10%

| | D2 | + (| f_x | =IF(C2>=20000,C2*20%,IF(C2 | 2>=15000,C2*15%,C2*10%)) | |
|----|---------------------|------------|-------|---|--------------------------|---------------------------|
| | | | | | | |
| | | | | | | |
| A | Α | В | С | D | Е | F |
| 1 | Emp no | | | Travelling Allowance(TA) Dearness Allowance(DA) | | House Rent Allowance(HRA) |
| 2 | CS001 Gopal 25000 | | 25000 | 5000 | 6250 | 2500 |
| 3 | CS002 Krishna 23000 | | 4600 | 5750 | 2300 | |
| 4 | CS003 | Mohan | 18000 | 2700 | 3600 | 1800 |
| 5 | CS004 | Radhe | 15000 | 2250 | 3000 | 1500 |
| 6 | CS005 | Shantha | 14000 | 1400 | 2100 | 1400 |
| 7 | CS006 | Naresh | 24000 | 4800 | 6000 | 2400 |
| 8 | CS007 | Murari | 16000 | 2400 | 3200 | 1600 |
| 9 | CS008 | Nayana | 30000 | 6000 | 7500 | 3000 |
| 10 | CS009 | Navya | 40000 | 8000 | 10000 | 4000 |
| 11 | CS010 | Manjula | 28000 | 5600 | 7000 | 2800 |

ii) If Basic pay of the employee is greater than or equal to 20000, give 25% from his/her Basic pay other else Basic pay is greater than or equal to 15000, give 20% else give 15% from his/her Basic pay.

DA = BP>=20000, BP*25%, BP>=15000, BP*20%, BP*15%

| | E2 | v (| f_{x} | =IF(C2>=20000,C2*25%,IF(C2 | 2>=15000,C2*20%,C2*15%)) | |
|----|---------------------|------------|-----------|----------------------------|--------------------------|---------------------------|
| | | | | | | |
| 1 | Α | В | С | D | Е | F |
| 1 | | | Basic Pay | Travelling Allowance(TA) | Dearness Allowance(DA) | House Rent Allowance(HRA) |
| 2 | CS001 | Gopal | 25000 | 5000 | 6250 | 2500 |
| 3 | CS002 Krishna 23000 | | 23000 | 4600 | 4600 5750 | |
| 4 | CS003 | Mohan | 18000 | 2700 | 3600 | 1800 |
| 5 | CS004 | Radhe | 15000 | 2250 | 3000 | 1500 |
| 6 | CS005 | Shantha | 14000 | 1400 | 2100 | 1400 |
| 7 | CS006 | Naresh | 24000 | 4800 | 6000 | 2400 |
| 8 | CS007 | Murari | 16000 | 2400 | 3200 | 1600 |
| 9 | CS008 | Nayana | 30000 | 6000 | 7500 | 3000 |
| 10 | CS009 | Navya | 40000 | 8000 | 10000 | 4000 |
| 11 | CS010 | Manjula | 28000 | 5600 | 7000 | 2800 |

iii) To Calculate HRA give 10% to each employee HRA= BP*10%

| | F2 | ▼ (| f_x | =C2*10% | | |
|----|--------|----------|-----------|--------------------------|------------------------|---------------------------|
| | | | | | | |
| | 1 | | | | | |
| A | Α | В | С | D | E | F |
| 1 | Emp no | Emp Name | Basic Pay | Travelling Allowance(TA) | Dearness Allowance(DA) | House Rent Allowance(HRA) |
| 2 | CS001 | Gopal | 25000 | 5000 | 6250 | 2500 |
| 3 | CS002 | Krishna | 23000 | 4600 | 5750 | 2300 |
| 4 | CS003 | Mohan | 18000 | 2700 | 3600 | 1800 |
| 5 | CS004 | Radhe | 15000 | 2250 | 3000 | 1500 |
| 6 | CS005 | Shantha | 14000 | 1400 | 2100 | 1400 |
| 7 | CS006 | Naresh | 24000 | 4800 | 6000 | 2400 |
| 8 | CS007 | Murari | 16000 | 2400 | 3200 | 1600 |
| 9 | CS008 | Nayana | 30000 | 6000 | 7500 | 3000 |
| 10 | CS009 | Navya | 40000 | 8000 | 10000 | 4000 |
| 11 | CS010 | Manjula | 28000 | 5600 | 7000 | 2800 |

iv) To calculate PF give 7% for each employee PF= BP*7%

| | G2 | • (| f_{x} | =C2*7% | | | |
|----|--------|----------|-----------|--------------------------|------------------------|---------------------------|--------------------|
| | | | | | | | |
| | | | | | | | |
| 1 | А | В | С | D | E | F | G |
| 1 | Emp no | Emp Name | Basic Pay | Travelling Allowance(TA) | Dearness Allowance(DA) | House Rent Allowance(HRA) | Provident Fund(PF) |
| 2 | CS001 | Gopal | 25000 | 5000 | 6250 | 2500 | 1750 |
| 3 | CS002 | Krishna | 23000 | 4600 | 5750 | 2300 | 1610 |
| 4 | CS003 | Mohan | 18000 | 2700 | 3600 | 1800 | 1260 |
| 5 | CS004 | Radhe | 15000 | 2250 | 3000 | 1500 | 1050 |
| 6 | CS005 | Shantha | 14000 | 1400 | 2100 | 1400 | 980 |
| 7 | CS006 | Naresh | 24000 | 4800 | 6000 | 2400 | 1680 |
| 8 | CS007 | Murari | 16000 | 2400 | 3200 | 1600 | 1120 |
| 9 | CS008 | Nayana | 30000 | 6000 | 7500 | 3000 | 2100 |
| 10 | CS009 | Navya | 40000 | 8000 | 10000 | 4000 | 2800 |
| 11 | CS010 | Manjula | 28000 | 5600 | 7000 | 2800 | 1960 |

v) To Calculate NP Sum all the BP, TA, DA, HRA and subtract by PF NP= BP+TA+DA+HRA-PF

| | H2 | v (| f _x | =C2+D2+E2+F2-G2 | | | | |
|----|--------|------------|----------------|--------------------------|------------------------|---------------------------|--------------------|-------------|
| | | | | | | | | |
| 1 | Α | В | С | D | G | Н | | |
| 1 | Emp no | Emp Name | Basic Pay | Travelling Allowance(TA) | Dearness Allowance(DA) | House Rent Allowance(HRA) | Provident Fund(PF) | Net Pay(NP) |
| 2 | CS001 | Gopal | 25000 | 5000 | 6250 | 2500 | 1750 | 37000 |
| 3 | CS002 | Krishna | 23000 | 4600 | 5750 | 2300 | 1610 | 34040 |
| 4 | CS003 | Mohan | 18000 | 2700 | 3600 | 1800 | 1260 | 24840 |
| 5 | CS004 | Radhe | 15000 | 2250 | 3000 | 1500 | 1050 | 20700 |
| 6 | CS005 | Shantha | 14000 | 1400 | 2100 | 1400 | 980 | 17920 |
| 7 | CS006 | Naresh | 24000 | 4800 | 6000 | 2400 | 1680 | 35520 |
| 8 | CS007 | Murari | 16000 | 2400 | 3200 | 1600 | 1120 | 22080 |
| 9 | CS008 | Nayana | 30000 | 6000 | 7500 | 3000 | 2100 | 44400 |
| 10 | CS009 | Navya | 40000 | 8000 | 10000 | 4000 | 2800 | 59200 |
| 11 | CS010 | Manjula | 28000 | 5600 | 7000 | 2800 | 1960 | 41440 |

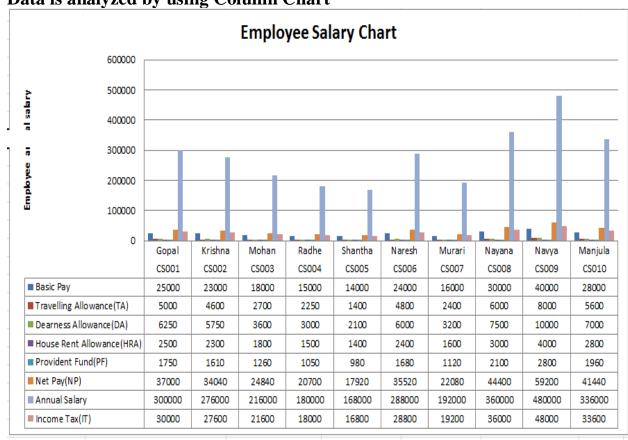
vi) To find IT first we need to calculate annual salary. Annual Salary = BP*12

| | | | | | | | | <u> </u> | |
|----|-------|---------|-----------|--------------------------|------------------------|---------------------------|--------------------|-------------|---------------|
| | 12 | ▼ (| f_x | =C2*12 | | | | | |
| | | , | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | Α | В | С | D | Е | F | G | Н | - 1 |
| 1 | | | Basic Pay | Travelling Allowance(TA) | Dearness Allowance(DA) | House Rent Allowance(HRA) | Provident Fund(PF) | Net Pay(NP) | Annual Salary |
| 2 | CS001 | Gopal | 25000 | 5000 | 6250 | 2500 | 1750 | 37000 | 300000 |
| 3 | CS002 | Krishna | 23000 | 4600 | 5750 | 2300 | 1610 | 34040 | 276000 |
| 4 | CS003 | Mohan | 18000 | 2700 | 3600 | 1800 | 1260 | 24840 | 216000 |
| 5 | CS004 | Radhe | 15000 | 2250 | 3000 | 1500 | 1050 | 20700 | 180000 |
| 6 | CS005 | Shantha | 14000 | 1400 | 2100 | 1400 | 980 | 17920 | 168000 |
| 7 | CS006 | Naresh | 24000 | 4800 | 6000 | 2400 | 1680 | 35520 | 288000 |
| 8 | CS007 | Murari | 16000 | 2400 | 3200 | 1600 | 1120 | 22080 | 192000 |
| 9 | CS008 | Nayana | 30000 | 6000 | 7500 | 3000 | 2100 | 44400 | 360000 |
| 10 | CS009 | Navya | 40000 | 8000 | 10000 | 4000 | 2800 | 59200 | 480000 |
| 11 | CS010 | Manjula | 28000 | 5600 | 7000 | 2800 | 1960 | 41440 | 336000 |
| | | | | | | | | | |

vii) If annual salary is greater than 50000, then have to pay 20% of IT other else pay 10% IT= Annual salary>500000,AS*20%,As*10%.

| _ | J2 | v (| f _x | =IF(I2>500000,I2*20%,I2*109 | %) | | | | | |
|----|--------|------------|----------------|-----------------------------|------------------------|---------------------------|--------------------|-------------|---------------|----------------|
| | | | | | -1 | | | | | |
| | | | | | | | | | | |
| 1 | А | ВС | | D E | | F G | | Н | ı | J |
| 1 | Emp no | Emp Name | Basic Pay | Travelling Allowance(TA) | Dearness Allowance(DA) | House Rent Allowance(HRA) | Provident Fund(PF) | Net Pay(NP) | Annual Salary | Income Tax(IT) |
| 2 | CS001 | Gopal | 25000 | 5000 | 6250 | 2500 | 1750 | 37000 | 300000 | 30000 |
| 3 | CS002 | Krishna | 23000 | 4600 | 5750 | 2300 | 1610 | 34040 | 276000 | 27600 |
| 4 | CS003 | Mohan | 18000 | 2700 | 3600 | 1800 | 1260 | 24840 | 216000 | 21600 |
| 5 | CS004 | Radhe | 15000 | 2250 | 3000 | 1500 | 1050 | 20700 | 180000 | 18000 |
| 6 | CS005 | Shantha | 14000 | 1400 | 2100 | 1400 | 980 | 17920 | 168000 | 16800 |
| 7 | CS006 | Naresh | 24000 | 4800 | 6000 | 2400 | 1680 | 35520 | 288000 | 28800 |
| 8 | CS007 | Murari | 16000 | 2400 | 3200 | 1600 | 1120 | 22080 | 192000 | 19200 |
| 9 | CS008 | Nayana | 30000 | 6000 | 7500 | 3000 | 2100 | 44400 | 360000 | 36000 |
| 10 | CS009 | Navya | 40000 | 8000 | 10000 | 4000 | 2800 | 59200 | 480000 | 48000 |
| 11 | CS010 | Manjula | 28000 | 5600 | 7000 | 2800 | 1960 | 41440 | 336000 | 33600 |

Data is analyzed by using Column Chart



Program 10: Create worksheet on Inventory Management: Sheet should contain Product code, Product name, Product type, MRP, Cost after % of discount, Date of purchase. Use appropriate formulas to calculate the above scenario. Analyse the data using appropriate chart and report the data.

Inventory Management

Inventory management refers to the process of ordering, storing, using, and selling a company's inventory. This includes the management of raw materials, components, and finished products, as well as warehousing and processing of such items.

To Calculate discount

As an example, if we are trying to apply a discount, we would like to reduce a particular amount by 10%. The formula is: =Price*Discount/100.

<u>Step 1:</u> Create simple inventory table including following field names like product code, product name, product type, MRP, cost after discount, date of purchase.

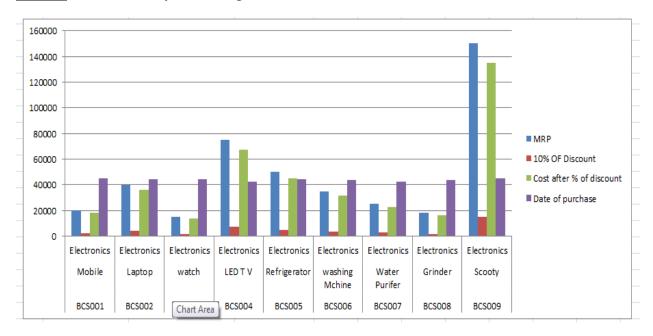
<u>Step2:</u> Calculate the discount by using the following formula =Price*Discount/100.

| | E2 | ▼ (fs | =D2*10/100 | | | | |
|----|--------------|----------------|--------------|--------|-----------------|--------------------------|------------------|
| | | | | | | | |
| | | | | | | | |
| 4 | Α | В | С | D | E | F | G |
| 1 | Product code | Product name | Product type | MRP | 10% OF Discount | Cost after % of discount | Date of purchase |
| 2 | BCS001 | Mobile | Electronics | 20000 | 2000 | 18000 | 25/10/2022 |
| 3 | BCS002 | Laptop | Electronics | 40000 | 4000 | 36000 | 04/12/2020 |
| 4 | BCS003 | watch | Electronics | 15000 | 1500 | 13500 | 31/08/2021 |
| 5 | BCS004 | LED T V | Electronics | 75000 | 7500 | 67500 | 19/03/2016 |
| 6 | BCS005 | Refrigerator | Electronics | 50000 | 5000 | 45000 | 13/02/2022 |
| 7 | BCS006 | washing Mchine | Electronics | 35000 | 3500 | 31500 | 12/09/2018 |
| 8 | BCS007 | Water Purifer | Electronics | 25000 | 2500 | 22500 | 04/05/2015 |
| 9 | BCS008 | Grinder | Electronics | 18000 | 1800 | 16200 | 27/07/2019 |
| LO | BCS009 | Scooty | Electronics | 150000 | 15000 | 135000 | 12/11/2023 |

<u>Step3:</u> Calculate the cost after % of discount by using the following formula =MRP- % of discount.

| | • | | | | - | <u> </u> | L. |
|----|--------------|----------------|--------------|--------|-----------------|--------------------------|------------------|
| | F2 | ▼ (*) J | € =D2-E2 | | | | |
| | | | | | | | |
| | | | | | | | |
| 1 | Α | В | С | D | Е | F | G |
| 1 | Product code | Product name | Product type | MRP | 10% OF Discount | Cost after % of discount | Date of purchase |
| 2 | BCS001 | Mobile | Electronics | 20000 | 2000 | 18000 | 25/10/2022 |
| 3 | BCS002 | Laptop | Electronics | 40000 | 4000 | 36000 | 04/12/2020 |
| 4 | BCS003 | watch | Electronics | 15000 | 1500 | 13500 | 31/08/2021 |
| 5 | BCS004 | LED T V | Electronics | 75000 | 7500 | 67500 | 19/03/2016 |
| 6 | BCS005 | Refrigerator | Electronics | 50000 | 5000 | 45000 | 13/02/2022 |
| 7 | BCS006 | washing Mchine | Electronics | 35000 | 3500 | 31500 | 12/09/2018 |
| 8 | BCS007 | Water Purifer | Electronics | 25000 | 2500 | 22500 | 04/05/2015 |
| 9 | BCS008 | Grinder | Electronics | 18000 | 1800 | 16200 | 27/07/2019 |
| 10 | BCS009 | Scooty | Electronics | 150000 | 15000 | 135000 | 12/11/2023 |

Step4: Data is analyzed using Column chart.

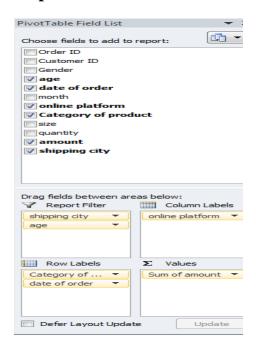


<u>Program11:</u> Create worksheet on Sales analysis of Merchandise Store: data consisting of Order ID, Customer ID, Gender, age, and date of order, month, online platform, Category of product, size, quantity, amount, shipping city and other details. Use of formula to segregate different categories and perform a comparative study using pivot tables and different sort of charts.

Step 1: Creating Merchandise Store Data

| ₩ e | xecl p9 & 10 | | | | | | | | | | | |
|-----|--------------|-------------|--------|-----|---------------|-----------|------------|-------------|-----------|----------|--------|--------------|
| 1 | А | В | С | D | Е | F | G | Н | - 1 | J | K | L |
| 1 | Order ID | Customer ID | Gender | age | date of order | month | ine platfo | gory of pro | size | quantity | amount | nipping city |
| 2 | ID157852 | CID745896 | MALE | 35 | 01/12/2023 | DECEMBER | AMAZON | MOBILE | 101 PIXEL | 1 | 20000 | MYSORE |
| 3 | ID458769 | CID745897 | FEMALE | 25 | 14/05/2021 | MAY | FLIPCART | EAR PHONE | L | 2 | 2000 | HASSAN |
| 4 | ID759686 | CID745898 | FEMALE | 20 | 07/08/2022 | AUGUST | MYNTRA | FOOTWARE | М | 1 | 1500 | BANGLORE |
| 5 | ID1060603 | CID745899 | MALE | 45 | 18/05/2016 | MAY | OILA | JEANS | L | 4 | 5000 | BELURE |
| 6 | ID1361520 | CID745900 | MALE | 42 | 25/09/2015 | SEPTEMBER | MEESHO | GOWN | S | 2 | 6000 | GOA |
| 7 | ID1662437 | CID745901 | FEMALE | 28 | 06/09/2022 | SEPTEMBER | ИАМА EARTI | LIP STICK | L | 8 | 1600 | KERALA |
| 8 | ID1963354 | CID745902 | MALE | 22 | 04/08/2022 | AUGUST | PURPALLE | KAJAL | М | 5 | 500 | ITAR PRADESH |
| 9 | ID2264271 | CID745903 | FEMALE | 32 | 17/03/2021 | MARCH | FRIST CRY | BABY FROCK | S | 1 | 1800 | ИАНА RASTRA |
| 10 | ID2565188 | CID745904 | MALE | 36 | 28/02/2020 | FEBRUARY | HOPSTOCH | BABY SHOE | М | 2 | 1500 | PUNE |
| 11 | ID2866105 | CID745905 | MALE | 19 | 04/12/2020 | DECEMBER | LIMEROAD | SAREE | L | 6 | 12000 | SURATHKAL |

Step 2: Pivot tables and different sort of charts.



| 11 | shipping city | (AII) | ~ | | | | | | | | | |
|----|---------------------|---------------|--------|----------|-----------|----------|----------|------------|--------|--------|-----------------|--------------------|
| 12 | age | (AII) | ~ | | | | | | | | | |
| 13 | | | | | | | | | | | | |
| 14 | Sum of amount | Column Labels | ▼ | | | | | | | | | |
| 15 | Row Labels | AJIO | AMAZON | FLIPCART | FRIST CRY | HOPSTOCH | LIMEROAD | MAMA EARTH | MEESHO | MYNTRA | PURPALLE | Grand Total |
| 16 | ■ BABY FROCK | | | | 18 | 00 | | | | | | 1800 |
| 17 | 17/03/2021 | | | | 18 | 00 | | | | | | 1800 |
| 18 | ■ BABY SHOE | | | | | 1500 |) | | | | | 1500 |
| 19 | 28/02/2020 | | | | | 1500 |) | | | | | 1500 |
| 20 | ■ EAR PHONE | | | 2000 | | | | | | | | 2000 |
| 21 | 14/05/2021 | | | 2000 | | | | | | | | 2000 |
| 22 | ■ FOOTWARE | | | | | | | | | 1500 | | 1500 |
| 23 | 07/08/2022 | | | | | | | | | 1500 | | 1500 |
| 24 | ■GOWN | | | | | | | | 6000 | | | 6000 |
| 25 | 25/09/2015 | | | | | | | | 6000 | | | 6000 |
| 26 | ■JEANS | 50 | 000 | | | | | | | | | 5000 |
| 27 | 18/05/2016 | 50 | 000 | | | | | | | | | 5000 |
| 28 | ■ KAJAL | | | | | | | | | | 500 | 500 |
| 29 | 04/08/2022 | | | | | | | | | | 500 | 500 |
| 30 | ■ LIP STICK | | | | | | | 1600 |) | | | 1600 |
| 31 | 06/09/2022 | | | | | | | 1600 |) | | | 1600 |
| 32 | ■ MOBILE | | 20000 |) | | | | | | | | 20000 |
| 33 | 01/12/2023 | | 20000 |) | | | | | | | | 20000 |
| 34 | ■SAREE | | | | | | 12000 | | | | | 12000 |
| 35 | 04/12/2020 | | | | | | 12000 | | | | | 12000 |
| 36 | Grand Total | 50 | 20000 | 2000 | 18 | 00 1500 | 12000 | 1600 | 6000 | 1500 | 500 | 51900 |