Refer dataset of Table 1:

1. Write formula to calculate Total, Average, Max and Min.
2. Use conditional formatting in this data in correct places.

*Table 1*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **A** | **B** | **C** | **D** | **E** | **F** | **G** | **H** | **I** | **J** | **K** | **L** |  |
| **1** | **Reg No** | **Name** | **Phy** | **Che** | **Bio** | **Maths** | **Eng** | **Hindi** | **Total** | **Average** | **Max** | **Min** |  |
| **2** | 1001 | Jan | 53 | 35 | 37 | 56 | 49 | 58 |  |  |  |  |  |
| **3** | 1002 | Feb | 52 | 37 | 16 | 43 | 16 | 24 |  |  |  |  |  |
| **4** | 1003 | Mar | 60 | 41 | 30 | 70 | 57 | 71 |  |  |  |  |  |
| **5** | 1004 | Apr | 18 | 57 | 18 | 20 | 16 | 67 |  |  |  |  |  |
| **6** | 1005 | May | 78 | 78 | 61 | 78 | 94 | 78 |  |  |  |  |  |
| **7** | 1006 | Jun | 22 | 74 | 32 | 53 | 18 | 47 |  |  |  |  |  |
| **8** | 1007 | Jul | 78 | 93 | 49 | 89 | 64 | 92 |  |  |  |  |  |
| **9** | 1008 | Aug | 39 | 52 | 95 | 78 | 88 | 55 |  |  |  |  |  |
| **10** | 1009 | Sep | 95 | 78 | 98 | 97 | 76 | 89 |  |  |  |  |  |
| **11** | 1010 | Oct | 39 | 22 | 94 | 81 | 100 | 37 |  |  |  |  |  |
| **12** | 1011 | Nov | 12 | 29 | 46 | 34 | 15 | 38 |  |  |  |  |  |
| **13** | 1012 | Dec | 18 | 59 | 45 | 20 | 17 | 51 |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Use following data set of *Table 2* for creating Bill. The format of the Bill is given in Table 3.

*Table 2*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Prod id** | 101 | 102 | 103 | 104 | 500 |
| **Name** | Pen | Pencil | Eraser | A4 Sheet | Notebook |
| **Price** | 25 | 5 | 2 | 250 | 75 |
| **Description** | Reynolds | Camlin | Natraj | JK Paper | ITC |
| **Discount %** | 2% | 1% | 1% | 15% | 5% |

1. When Prod id is entered, Name, Price, Description and Discount % should be displayed automatically.
2. When (Qty) Quantity is Entered, it should be able to calculate Discount Amount, Amount Payable and Grand Total wherever it’s applicable.
3. Create a drop down for Prod id in the cell B2 to B6.

*Table 3*

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **A** | **B** | **C** | **D** | **E** | **F** | **G** | **H** | **I** |
| 1 | **Sl.** | **Prod id** | **Name** | **Price** | **Description** | **Discount %** | **Qty** | **Discount Amount** | **Amount Payable** |
| 2 | 1 | 103 |  |  |  |  |  |  |  |
| 3 | 2 | 104 |  |  |  |  |  |  |  |
| 4 | 3 | 500 |  |  |  |  |  |  |  |
| 5 | 4 | 104 |  |  |  |  |  |  |  |
| 6 | 5 | 102 |  |  |  |  |  |  |  |
| 7 |  |  | Grand total |  |  |  |  |  |  |

Refer Data given in Table 4 below, It depicts sales of water of 500 ml and 1 Ltr in 4 different cities. Quantity sold of these items are captured in column B and D for 500 ml and 1 Ltr respectively. The price of both the products are given in B8 and B9.

1. Write formula to calculate (Revenue) Rev-I and (Revenue) Rev-II and Total Revenue. Also calculate Grand Total.

*Table 4*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **A** | **B** | **C** | **D** | **E** | **F** |
| **1** | **City** | **Water 500ML**  **(Quantity)** | **Rev-I** | **Water 1Ltr**  **(Quantity)** | **Rev-II** | **Total Rev** |
| **2** | Bangalore | 12 |  | 25 |  |  |
| **3** | Chennai | 45 |  | 35 |  |  |
| **4** | Mysore | 34 |  | 10 |  |  |
| **5** | Mangalore | 54 |  | 50 |  |  |
| **6** | **Grand Total** |  |  |  |  |  |
| **7** |  |  |  |  |  |  |
| **8** | **Water 500ML** | ₹ 4.00 |  |  |  |
| **9** | **Water 1Ltr** | ₹ 9.00 |  |  |  |

Refer data given in Table 5.

1. Use the data given in Master data Sheet. Do Data analysis based on Rep, Region, Item and Order Date!

{Hint : You can use Pivot Table, Chart, Conditional Formatting etc. Write Your understanding about the output!

Create at-least 4 outputs!

Table 5

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **OrderDate** | **Region** | **Rep** | **Item** | **Units** | **Unit Cost** | **Total** |
| 3/31/23 | East | Jones | Eraser | 95 | 1.99 | 189.05 |
| 3/31/23 | North | Kivell | Folder | 50 | 19.99 | 999.50 |
| 3/31/23 | North | Jardine | Eraser | 36 | 4.99 | 179.64 |
| 3/31/23 | North | Gill | Pen | 27 | 19.99 | 539.73 |
| 3/30/23 | West | Sorvino | Eraser | 56 | 2.99 | 167.44 |
| 3/30/23 | East | Jones | Folder | 60 | 4.99 | 299.40 |
| 3/30/23 | North | Andrews | Eraser | 75 | 1.99 | 149.25 |
| 3/30/23 | North | Jardine | Eraser | 90 | 4.99 | 449.10 |
| 3/30/23 | West | Thompson | Eraser | 32 | 1.99 | 63.68 |
| 3/30/23 | East | Jones | Folder | 60 | 8.99 | 539.40 |
| 3/30/23 | North | Morgan | Eraser | 90 | 4.99 | 449.10 |
| 3/30/23 | East | Howard | Folder | 29 | 1.99 | 57.71 |
| 2/26/23 | East | Parent | Folder | 81 | 19.99 | 1,619.19 |
| 2/26/23 | East | Jones | Eraser | 35 | 4.99 | 174.65 |
| 2/26/23 | North | Smith | Chair | 2 | 125.00 | 250.00 |
| 2/26/23 | East | Jones | Pen Set | 16 | 15.99 | 255.84 |
| 2/26/23 | North | Morgan | Folder | 28 | 8.99 | 251.72 |
| 3/30/23 | East | Jones | Pen | 64 | 8.99 | 575.36 |
| 3/30/23 | East | Parent | Pen | 15 | 19.99 | 299.85 |
| 2/26/23 | North | Kivell | Pen Set | 96 | 4.99 | 479.04 |
| 2/26/23 | North | Smith | Eraser | 67 | 1.29 | 86.43 |
| 2/27/23 | East | Parent | Pen Set | 74 | 15.99 | 1,183.26 |
| 2/28/23 | North | Gill | Folder | 46 | 8.99 | 413.54 |
| 3/1/23 | North | Smith | Folder | 87 | 15.00 | 1,305.00 |
| 3/2/23 | East | Jones | Folder | 4 | 4.99 | 19.96 |
| 3/3/23 | West | Sorvino | Folder | 7 | 19.99 | 139.93 |
| 2/27/23 | North | Jardine | Pen Set | 50 | 4.99 | 249.50 |
| 2/27/23 | South | Andrews | Eraser | 66 | 1.99 | 131.34 |
| 2/27/23 | East | Howard | Pen | 96 | 4.99 | 479.04 |
| 2/27/23 | North | Gill | Eraser | 53 | 1.29 | 68.37 |
| 3/1/23 | North | Gill | Folder | 80 | 8.99 | 719.20 |
| 3/1/23 | North | Kivell | Chair | 5 | 125.00 | 625.00 |
| 3/1/23 | South | Jones | Pen Set | 62 | 4.99 | 309.38 |
| 3/1/23 | North | Morgan | Pen Set | 55 | 12.49 | 686.95 |
| 2/28/23 | South | Kivell | Pen Set | 42 | 23.95 | 1,005.90 |
| 2/28/23 | West | Sorvino | Chair | 3 | 275.00 | 825.00 |
| 2/28/23 | North | Gill | Eraser | 7 | 1.29 | 9.03 |
| 2/28/23 | West | Sorvino | Pen | 76 | 1.99 | 151.24 |
| 2/28/23 | West | Thompson | Folder | 57 | 19.99 | 1,139.43 |
| 2/28/23 | North | Andrews | Eraser | 14 | 1.29 | 18.06 |
| 2/28/23 | South | Jardine | Folder | 11 | 4.99 | 54.89 |
| 2/28/23 | South | Jardine | Folder | 94 | 19.99 | 1,879.06 |
| 2/28/23 | South | Andrews | Folder | 28 | 4.99 | 139.72 |

1. Refer data of table 1 and find out grades of the students based on following criteria (You can use if condition or Vlookup/Hlookup).

|  |  |
| --- | --- |
| Marks | Grade |
| >=80 | A+ |
| >=60 | A |
| >=50 | B |
| >=40 | C |
| <40 | Fail |

1. In the <Pinevalley.xlsx> file, the first worksheet contains the salaries of several employees at Pine Valley University, the second worksheet contains the age of the employees, and the third worksheet contains the years of experience. Create a fourth worksheet that contains the salary, age, and experience for each employee. [Hint : Use Lookup/Vlookup/Hlookup/Xlookup]

Use file [Makeup filter](Makeupfilter.xlsx) for question 10 to 15 and perform following tasks:

1. Find all transactions in which Hallagan sold eyeliner in the West region
2. Find all transactions that rank in the top 5 percent with regard to units sold.
3. The top 20 revenue-generating transactions that involve foundation sales.
4. Find all transactions involving sales of at least 60 units during 2004 for which the per-unit price was a maximum of $3.10.
5. Find all foundation transactions during the first three months of 2004 for which the per-unit price was larger than the average price received for foundation during the entire period
6. Find all transactions in which Zaret or Betsy sold either lipstick or foundation.
7. Create a Loan Calculator in following format: The calculator will accept 4 inputs, Loan Amount, Rate of Interest, Year and Date and all other outputs should be generated as given in following sample:

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Loan Amount | ₹ 10,000.00 |  | |  | |  | |
|  | Rate of Interest | 8% |  | |  | |  | |
|  | Year | 0.5 |  | |  | |  | |
|  | Date | 3/28/2023 |  | |  | |  | |
|  | EMI | ₹ 1,705.77 |  | |  | |  | |
|  |  |  |  | |  | |  | |
|  |  |  |  | |  | |  | |
| EMI # | Date of EMI | Principal | | Interest | | Total EMI | | Balance | |
| 1 | 3/28/2023 | ₹ 1,639.10 | | 66.66667 | | ₹ 1,705.77 | | ₹ 8,360.90 | |
| 2 | 4/28/2023 | ₹ 1,650.03 | | 55.73931 | | ₹ 1,705.77 | | ₹ 6,710.86 | |
| 3 | 5/28/2023 | ₹ 1,661.03 | | 44.73909 | | ₹ 1,705.77 | | ₹ 5,049.83 | |
| 4 | 6/28/2023 | ₹ 1,672.11 | | 33.66555 | | ₹ 1,705.77 | | ₹ 3,377.73 | |
| 5 | 7/28/2023 | ₹ 1,683.25 | | 22.51818 | | ₹ 1,705.77 | | ₹ 1,694.47 | |
| 6 | 8/28/2023 | ₹ 1,694.47 | | 11.2965 | | ₹ 1,705.77 | | ₹ 0.00 | |
|  |  |  | |  | |  | |  | |