Question 1 - Use conditional formatting to fill each cell in the state column with a different color, depending on whether the associated campaign was "successful," "failed," "cancelled," or is currently "live".

Solution – I have colored the individual cells based by the colors shown below –

|  |
| --- |
| canceled |
| failed |
| live |
| successful |

Question 2 - Create a new column at column O called percent funded that uses a formula to uncover how much money a campaign made towards reaching its initial goal. Use conditional formatting to fill each cell in the percent funded column using a three-color scale. The scale should start at 0 and be a dark shade of red, transitioning to green at 100, and then moving towards blue at 200.

Solution – A three color scale was used from 0 being dark red to 100 being green to 200 and above being blue.

Question 3 - Create a new column at column P called average donation that uses a formula to uncover how much each backer for the project paid on average.

Solution – Formula is Column E/Column L which is nothing but amount pledged/backer’s count

Question 4 - Create two new columns, one called category at Q and another called sub-category at R, which use formulas to split the Category and Sub-Category column into two parts.

Solution – Using the left, right, len and find functions the categories and sub-categories are split into 2 columns – Q and R.

Question 5 - Create a new sheet with a pivot table that will analyze your initial worksheet to count how many campaigns were "successful," "failed," "cancelled," or are currently "live" per category. Create a stacked column pivot chart that can be filtered by country based on the table you have created.

Solution –

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| country | (All) |  |  |  |  |
|  |  |  |  |  |  |
| **Count of state** | **Column Labels** |  |  |  |  |
| **Row Labels** | **canceled** | **failed** | **live** | **successful** | **Grand Total** |
| film & video | 40 | 180 |  | 300 | 520 |
| food | 20 | 140 | 6 | 34 | 200 |
| games |  | 140 |  | 80 | 220 |
| journalism | 24 |  |  |  | 24 |
| music | 20 | 120 | 20 | 540 | 700 |
| photography |  | 117 |  | 103 | 220 |
| publishing | 30 | 127 |  | 80 | 237 |
| technology | 178 | 213 |  | 209 | 600 |
| theater | 37 | 493 | 24 | 839 | 1393 |
| **Grand Total** | **349** | **1530** | **50** | **2185** | **4114** |

Question 6 - Create a new sheet with a pivot table that will analyze your initial sheet to count how many campaigns were "successful," "failed," "cancelled," or are currently "live" per sub-category. Create a stacked column pivot chart that can be filtered by country and parent-category based on the table you have created. The dates stored within the deadline and launched\_at columns are using unix timestamps. Fortunately for us, there is a formula out there that can be used to convert these timestamps into a normal date.

Solution –

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| country | (All) |  |  |  |  |
| Category | (All) |  |  |  |  |
|  |  |  |  |  |  |
| **Count of state** | **Column Labels** |  |  |  |  |
| **Row Labels** | **canceled** | **failed** | **live** | **successful** | **Grand Total** |
| animation |  | 100 |  |  | 100 |
| art books | 20 |  |  |  | 20 |
| audio | 24 |  |  |  | 24 |
| children's books |  | 40 |  |  | 40 |
| classical music |  |  |  | 40 | 40 |
| documentary |  |  |  | 180 | 180 |
| drama |  | 80 |  |  | 80 |
| electronic music |  |  |  | 40 | 40 |
| faith |  | 40 | 20 |  | 60 |
| fiction |  | 40 |  |  | 40 |
| food trucks | 20 | 120 |  |  | 140 |
| gadgets |  | 20 |  |  | 20 |
| hardware |  |  |  | 140 | 140 |
| indie rock |  | 20 |  | 140 | 160 |
| jazz |  | 60 |  |  | 60 |
| makerspaces |  | 11 |  | 9 | 20 |
| metal |  |  |  | 20 | 20 |
| mobile games |  | 40 |  |  | 40 |
| musical | 20 | 60 |  | 60 | 140 |
| nature |  | 20 |  |  | 20 |
| nonfiction |  |  |  | 60 | 60 |
| people |  | 20 |  |  | 20 |
| photobooks |  | 57 |  | 103 | 160 |
| places |  | 20 |  |  | 20 |
| plays |  | 353 | 19 | 694 | 1066 |
| pop |  |  |  | 40 | 40 |
| radio & podcasts |  |  |  | 20 | 20 |
| restaurants |  | 20 |  |  | 20 |
| rock |  |  |  | 260 | 260 |
| science fiction | 40 |  |  |  | 40 |
| shorts |  |  |  | 60 | 60 |
| small batch |  |  | 6 | 34 | 40 |
| space exploration | 18 | 2 |  | 40 | 60 |
| spaces | 17 | 80 | 5 | 85 | 187 |
| tabletop games |  |  |  | 80 | 80 |
| television |  |  |  | 60 | 60 |
| translations | 10 | 47 |  |  | 57 |
| video games |  | 100 |  |  | 100 |
| wearables | 60 | 120 |  | 20 | 200 |
| web | 100 | 60 |  |  | 160 |
| world music | 20 |  |  |  | 20 |
| **Grand Total** | **349** | **1530** | **50** | **2185** | **4114** |

Question 7 - Create a new column named Date Created Conversion that will use this formula to convert the data contained within launched\_at into Excel's Date format

Solution – Used the below formula to generate the results:

=TEXT((((J2/60)/60)/24)+DATE(1970,1,1)+(-5/24),"m/d/yyyy")

Question 8 - Create a new column named Date Ended Conversion that will use this formula to convert the data contained within deadline into Excel's Date format

Solution - Used the below formula to generate the results:

=TEXT((((I2/60)/60)/24)+DATE(1970,1,1)+(-5/24),"m/d/yyyy")

Question 9 - Create a new sheet with a pivot table with a column of state, rows of Date Created Conversion, values based on the count of state, and filters based on parent category and Years. Now create a pivot chart line graph that visualizes this new table.

Solution –

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Category | (All) |  |  |  |  |
| Years | (All) |  |  |  |  |
|  |  |  |  |  |  |
| **Count of state** | **Column Labels** |  |  |  |  |
| **Row Labels** | **canceled** | **failed** | **live** | **successful** | **Grand Total** |
| Jan | 34 | 149 | 2 | 183 | 368 |
| Feb | 27 | 105 | 18 | 202 | 352 |
| Mar | 28 | 108 | 30 | 179 | 345 |
| Apr | 27 | 103 |  | 193 | 323 |
| May | 26 | 126 |  | 233 | 385 |
| Jun | 27 | 148 |  | 213 | 388 |
| Jul | 44 | 148 |  | 192 | 384 |
| Aug | 32 | 134 |  | 167 | 333 |
| Sep | 24 | 127 |  | 148 | 299 |
| Oct | 20 | 150 |  | 184 | 354 |
| Nov | 37 | 113 |  | 180 | 330 |
| Dec | 23 | 119 |  | 111 | 253 |
| **Grand Total** | **349** | **1530** | **50** | **2185** | **4114** |

Create a report in Microsoft Word and answer the following questions...

Question 10 - What are three conclusions we can make about Kickstarter campaigns given the provided data?

Solution: The three conclusions we can make about Kickstarter campaigns given the provided data are –

1. Music and theater campaigns are the most successful campaigns launched over the entire range of years.
2. 2009 was the worst year in terms of campaign success rate.
3. Music related campaigns launched in January have the highest success rate and when launched in December have the least success rate
4. Theater related campaigns launched in May have the highest success rate and when launched in December have the least success rate.

Question 11 - What are some of the limitations of this dataset?

Solution –

1. The dataset tells the amount of money people have pledged. But it doesn’t say the actual amount of money donated by people. The actual money donated by people can give us a clear picture of why the campaign became successful.
2. Some of the campaigns have a pledge amount that is more than 50% of the goal amount and yet have failed whereas some of the campaigns have less than 50% donation as compared to the goal amount and yet have succeeded. The table should tell us what other factors affect the success of the campaign.

Question 12 - What are some other possible tables/graphs that we could create?

Solution – We can also plot the categories Vs average donation and categories Vs number of backers to obtain information about which categories have the highest average donations and highest number of backers.