## Task 1 FILL COMMAND.

- Enter today's date in A3:A100000
- Enter consecutive dates in B3:B100000 starting from today's date
- Enter only weekdays in C3:C100000 starting from today's date
- Enter a sequence of consecutive months starting from today's date (D3:D100000)
- Enter consecutive numbers starting from -5 (E3:E100000)
- Enter numbers with a growth rate of -1.5 starting from 1 (F3:F100000)
- Enter a linear sequence of numbers with a step of 3 starting from 0 (G3:G100000)

#### **Answers:**

- 1. Cell command A3:A100000. 2. Type =Today() in cell A3 3. Press fill command/Series.../Rows, Autofill, OK
- 2. Cell command B3:B100000. 2. Type =Today() in cell B3 3. Press fill command/Series.../Rows, Date, Day, OK
- 3. Cell command C3:C100000. 2. Type =Today() in cell C3 3. Press fill command/Series.../Rows, Date, Weekday, OK
- 4. Cell command D3:D100000. 2. Type = Today() in cell D3 3. Press fill command/Series.../Rows, Date, Month, OK
- 5. Cell command E3:E100000. 2. Type -5 in cell E3 3. Press fill command/Series.../Linear, Step value: 1, OK
- 6. Cell command F3:F100000. 2. Type 1 in cell F3 3. Press fill command/Series.../Growth, Rate value: -1.5, OK
- 7. Cell command G3:G100000. 2. Type 0 in cell G3 3. Press fill command/Series.../Linear, Step value: 3, OK

### Task 2 Find errors, text and convert text into numbers.

Say we have a long list stating the sales a company made during January. There are some mistakes in the list. Some cells are written as a text, when their type should be number. Some cells appear as errors. The list can have a large number of entries and as a result it would be practically difficult and time consuming to identify the mistakes manually without using excel's features.

## **Answers:**

In order to identify the errors (#N/A) you press the filter for January and go to the end of the list of the sorted values of the filter section. The text cells always appear at the end of the sort and so #N/A can be found there and can be excluded or corrected from the list.

One way to convert text to a general number type is to add an empty cell to it. When you add an empty cell you do not change the value of the cell and at the same time excel assumes that you are dealing with numbers since you are making a calculation. And so it converts any potential text or date cell types etc.. into numbers. The way to do that is to copy and empty cell. Then select all the list of revenues, then press paste special... Under the operation title click add. And the press OK. All the cells have a number data type.

# Task 3 Sum of Top values from a range

Say we have a range of values an array of values. And we want to take the top 5 values of this array and find their sum.

### **Answers:**

One way to do this is with the help of conditional formatting. Select the press conditional formatting press the top 10 values decrease the number to five press ok. The top 5 five values will have a specific format. (Red background by default). Now you select them manually and add them to the sum formula.

A more technical way to do this is by using the Large formula. The large formula takes as parameters the array the list of values, and the number nth biggest value of the array which you want to find so if you type 1 then it will return the largest number of the array. If you type 3 it will return the third largest number of the array and so on. You can manually write the large function 5 times taking the first second third fourth and fifth greatest values of the array and then add them. Or another straight but more complicated way of doing this is by using the sequence formula within the large formula which is within the sum formula. For example sum(large(array x, sequence(5))). This command takes the sum of the 5 largest values of array x.

# Task 4 Import and modify files into an excel spreadsheet using Power Query.

As an example I am given having 3 files that record the sales of a company that selling cookies throughout the years of 2017, 2018, 2019 respectively.

#### **Answers:**

Answer by opening a new spreadsheet I press the import file option of the Get Data button in the Data section in the excel. Choose the file which contains my data and press combine and transform data and power query will open to you. There you can delete columns or certain rows, split data columns, make operations between two columns and place the results on another column which we can create. Change the format of display of certain data, such as the date for example. In the end you transform the data, and the combined data is loaded into the spreadsheet. From that you can create a pivot table which will enable you to make use of these records to find useful information and insights from this. You can find the total value of sales the company has made through the years or quarters or months for example. Then you can create different charts such as a line chart for example. Displaying the profits of the company through time.