

DATA ANALYTICS CU Mini Project

Task 1

Open the “Week 1 – mini_project”. Using the **Results** sheet, complete the following:

- In cell A2, input “Student Name” and add 6 names A3:A8 as shown below:

Student Name
James
Biner
Lydia
Fedreic
Kany
Dembama

- Enter the 4 courses (Mathematics, English, Science, IT) at B2: E2– *make sure the course names are visible and are bold*
- Input scores of each students based on each course as shown below:

Mathematics	English	Science	IT
72	95	89	73
78	76	65	72
64	77	60	84
89	55	62	70
48	59	56	42
50	43	50	60

- Create a table title by merging cell B1:E1 and name it “Student Result”. Format background to be black colour and bold white font.
- Input the subjects name again at H2:K2 and bold
- Write a formula that to check the score of the students per subject and return grades as follows:
 - A if score is greater than or equal to 90
 - B if score is greater than or equal to 70 but less than 90
 - C if score is greater than or equal to 50 but less than 70
 - F if score is less than 50
- Create a table title by merging cell H1:K1 and name it “Student Grade”. Format background to be blue colour and bold white font.
- Input the subjects name again at N2:Q2 and bold
- Write a formula that to check the score of the students per subject and return the grade points:
 - 5 if grade is “A”
 - 4 if grade is “B”
 - 3 if grade is “C”
 - 0 if grade is “F”

- Create a table title by merging cell N1:Q1 and name it “Student Grade Point”. Format background to be light green colour and bold white font.
- At this point, the data is probably too wide for your screen size. Let the first column (Student Name) be fixed when you scroll to right of sheet so we can track each grade points with each student name
- Give the “Student Name” column an orange background with white font
- Input the subjects name again at T2:W2 and bold
- Assign the following units to the subjects (T3:W3):
 - Mathematics – 4
 - English – 4
 - Science – 3
 - Information Technology – 2
- Create a table title by merging cell T1:W1 and name it “Units”. Format background to be yellow colour and bold black font.
- Input the subjects name again at Z2:AC2
- Create a table title by merging cell Z1:AC1 and name it “Student Final Grade Point”. Format background to be dark green colour and bold white font.
- Write a formula to multiply the grade point of each student by the corresponding course unit in the “Units” table
- In cell AF2, input “Grade Point Average (GPA)”, Format background to be dark green colour and bold white font. Ensure all characters are seen.
- Format the GPA to 2 decimal places
- In cell AG2, input “Graduate”. Format background to be dark green colour and bold white font.
- In cell AH1, input 2.5. Format background to be red colour and bold white font.
- For each student, add all the final grade point from the courses and divide by the summation of all course units (T3:W3)
- Write a formula that to if the student will graduate or not using:
 - “YES” if GPA is greater than or equal to 2.5 (cell AH1)
 - “NO” if GPA is less than 2.5 (cell AH1)
- Align all the data to the centre of the cell.
- Scroll to the far right of the sheet so that your output looks like this:

	A	AF	AG	AH
1				2.5
2	Student Name	Grade Point Average (GPA)	Graduate	
3	James			
4	Biner			
5	Lydia			
6	Fedreic			
7	Kany			
8	Dembama			

Task 2

Using the **Customers** sheet, complete the following:

- Insert a new column after “LastName” and name it “FullName”
- Formulate the FullName column by joining the “Prefix”, “FirstName” and “LastName” together separated by a space
- Insert a new column after Birthdate and name it “Year of Birth”
- Formulate the “Year of Birth” column by extracting the year from the BirthDate (*tip: use google*)
- Insert a new column after “MaritalStatus” and name it “Marital Status Full”
- Formulate the “Marital Status Full” column Change the “S” to “Single” and the “M” to “Married”
- Insert a new column after “Gender” and name it “Gender Full”
- Formulate the “Gender Full” column Change the “F” to “Female” and the “M” to “Male”
- Insert a new column after “Email Address” and name it “Username”
- Formulate the Username column by extracting all the words before the “@”
- Format “AnnualIncome” column to currency (\$)
- Insert a new column after “AnnualIncome” and name it “Wealth Category”
- In Wealth Category column, write a formula to check the wealth level of the customers and return:
 - “Wealthy” if AnnualIncome is greater than or equal to 150,000
 - “Rich” if AnnualIncome is greater than or equal to 100,000
 - “Average” if AnnualIncome is greater than or equal to 50,000
 - “Poor” if AnnualIncome is less than 50,000

PS: Don’t forget the best practice to color your newly created columns

Task 3

- Create a new sheet and name it “Summary”
- Merge A1:B1 and name it “Customer Summary”. Format background to be dark green colour and bold white font.
- Enter the following beneath A1 – *make sure they are visible and are bold as shown:*

	A	B
1	Customer Summary	
2	Total Customers	
3	1956	
4	Single	
5	Female	
6	Total Annual Income	
7	Average Annual Income	
8	Rich	
9	High School	
10	Male Bachelors	
11	Graduate Degree	
12	Professional (90000)	
13	Clerical	

- Compute the corresponding result beneath B1– *make sure they are visible and are bold as shown:*
 - *Total Customers – total number of customers*
 - *1956 – number of customers born in year 1956*
 - *Single – number of customers that are single*
 - *Female - number of customers that are female*
 - *Total Annual Income – Total income of all customers*
 - *Average Annual Income – average income of all customers*
 - *Rich - number of customers that are rich*
 - *High School - number of customers that are in high school*
 - *Male Bachelors - number of customers that are male and bachelors*
 - *Graduate Degree – average salary of graduate degree holders*
 - *Professional (90,000) - number of professional customers that earn more than 90,000*
(tip: you might want to use google [here](#))
 - *Clerical – number of clerical customers*
- Use data validation for clerical (A13) to include all other occupation and enable us to switch between them easily