**DAILY ASSESSMENT**

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| **Date:** | **27/05/2020** | **Name:** | **Dhavala** |
| **Course:** | **Digital Signal Processing** | **USN:** | **4AL17EC027** |
| **Topic:** | * **Fourier Transforms** * **FFT** * **FFT Fast Fourier Transform Matlab** * **FIR and IIR Filters** * **Study and analysis FIR and IIR using FDA tool in MatLab** * **Introduction to WT** * **CWT & DWT** * **Implementation of signal Filtering signal using WT in MatLAb** * **Short-time Fourier Transform and the Spectogram** * **Welch's method and windowing** * **ECG Signal Analysis Using MATLAB** | **Semester & Section:** | **6TH SEM & A Section** |
| **Github Repository:** | **Dhavala27** |  |  |

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| **FORENOON SESSION DETAILS** |
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| **Report** |

**DAILY ASSESSMENT**

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| **Date:** | **27/05/2020** | **Name:** | **Dhavala** |
| **Course:** | **PYTHON** | **USN:** | **4AL17EC027** |
| **Topic:** | * **Graphical User Interfaces with Tkinter** * **Interacting with Databases** | **Semester & Section:** | **6TH SEM & A Section** |
| **Github Repository:** | **Dhavala27** |  |  |

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| **AFTERNOON SESSION DETAILS** |
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| **Report** |
| **Create a Multi-widget GUI**  Create a Python program that expects a kilogram input value and converts that value to grams, pounds, and ounces when the user pushes the *Convert* button.  The program will look similar to the one in the following picture:    Tip:  1 kg = 1000 grams  1 kg = 2.20462 pounds  1 kg = 35.274 ounces  Solution   1. from tkinter import \* 3. # Create an empty Tkinter window 4. window=Tk() 6. def from\_kg(): 7. # Get user value from input box and multiply by 1000 to get kilograms 8. gram=float(e2\_value.get())\*1000 10. # Get user value from input box and multiply by 2.20462 to get pounds 11. pound=float(e2\_value.get())\*2.20462 13. # Get user value from input box and multiply by 35.274 to get ounces 14. ounce=float(e2\_value.get())\*35.274 16. # Empty the Text boxes if they had text from the previous use and fill them again 17. t1.delete("1.0", END) # Deletes the content of the Text box from start to END 18. t1.insert(END,gram) # Fill in the text box with the value of gram variable 19. t2.delete("1.0", END) 20. t2.insert(END,pound) 21. t3.delete("1.0", END) 22. t3.insert(END,ounce) 24. # Create a Label widget with "Kg" as label 25. e1=Label(window,text="Kg") 26. e1.grid(row=0,column=0) # The Label is placed in position 0, 0 in the window 28. e2\_value=StringVar() # Create a special StringVar object 29. e2=Entry(window,textvariable=e2\_value) # Create an Entry box for users to enter the value 30. e2.grid(row=0,column=1) 32. # Create a button widget 33. # The from\_kg() function is called when the button is pushed 34. b1=Button(window,text="Convert",command=from\_kg) 35. b1.grid(row=0,column=2) 37. # Create three empty text boxes, t1, t2, and t3 38. t1=Text(window,height=1,width=20) 39. t1.grid(row=1,column=0) 41. t2=Text(window,height=1,width=20) 42. t2.grid(row=1,column=1) 44. t3=Text(window,height=1,width=20) 45. t3.grid(row=1,column=2) 47. # This makes sure to keep the main window open 48. window.mainloop()   **Querying data from a MySQL database**  Set up a remote MySQL database on a server with the IP address 108.167.140.122, so you don't have to install and set up a MySQL database yourself. To connect and query data from that remote database, you need a *username*, *password*, and the name of the *database*. These are written inside the Python script below.  You also need a Python library that interacts with MySQL databases. Many libraries are compatible, but I prefer *mysql.connector*. To install *mysql.connector*: simply execute pip install mysql-connector or pip3 install mysql-connector depending on whether you use *pip* or *pip3*. Once you install the library, try this working example:   1. import mysql.connector 2. word = input("Enter a word in English and press Enter: ") 3. con = mysql.connector.connect( 4. user="ardit700\_student", 5. password = "ardit700\_student", 6. host="108.167.140.122", 7. database = "ardit700\_pm1database" 8. ) 9. cursor = con.cursor() 10. query = cursor.execute("SELECT \* FROM Dictionary WHERE Expression = '%s'" % word) 11. results = cursor.fetchall() 12. if results: 13. for result in results: 14. print(result[1]) 15. else: 16. print("We couldn't find any results about that.") |