

**Savitribai Phule Pune University**

**T. Y. B. B. A. (C.A.) Semester - V**

**(CBCS 2019 Pattern)**

**PRaCTICAL SLIP**

**Name : Lalit devidas patil**

**College Name: SINHGAD COLLEGE OF ARTS & COMMERCE WARJE PUNE-58**

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**Roll no : 106 Division:b seat NO:**

**Academic year : 2024-25**

***Certificate***

**This is to certify that**

**Mr. PATIL LALIT DEVIDAS**

**Seat Number\_\_\_\_\_of T.Y.BBA(CA) Sem - V has Successfully completed Laboratory course**

**(PYTHON) in the Year . He has scored mark out of 10 (For Lab Book).**

**--------------------------------**

**Subject Teacher H.O.D./Coordinator**

**Internal Examiner External Examiner**

**Slip 1**

**A) Write a Python program to accept n numbers in list and remove duplicates from a list.**

def remove\_duplicates(numbers):

return list(set(numbers))

n = int(input("Enter the number of elements: "))

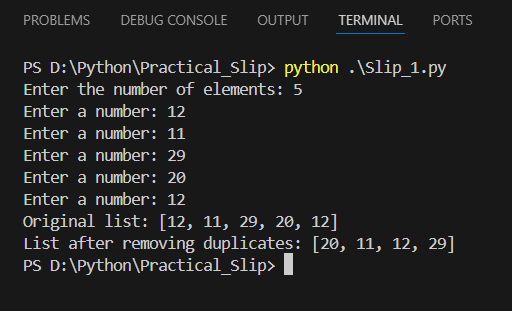
numbers = []

for \_ in range(n):

num = int(input("Enter a number: "))

numbers.append(num)

print("Original list:", numbers)

print("List after removing duplicates:", remove\_duplicates(numbers))

**B) Write Python GUI program to take accept your birthdate and output your age when a button is pressed.**

import tkinter as tk

from tkinter import messagebox

from datetime import datetime

def calculate\_age():

try:

birth\_date = datetime.strptime(entry.get(), "%Y-%m-%d")

today = datetime.today()

age = today.year - birth\_date.year - ((today.month, today.day) < (birth\_date.month, birth\_date.day))

messagebox.showinfo("Age", f"Your age is: {age} years")

except ValueError:

messagebox.showerror("Invalid date", "Please enter a valid date in YYYY-MM-DD format")

app = tk.Tk()

app.title("Age Calculator")

label = tk.Label(app, text="Enter your birthdate (YYYY-MM-DD):")

label.pack(pady=10)

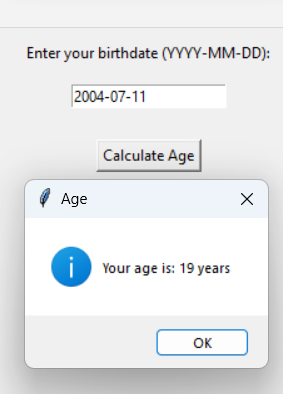
entry = tk.Entry(app)

entry.pack(pady=5)

button = tk.Button(app, text="Calculate Age", command=calculate\_age)

button.pack(pady=20)

app.mainloop()



**Slip 2**

**A)** **Write a Python function that accepts a string and calculate the number of upper case letters and lower case letters.**

**Sample String: 'The quick Brown Fox'**

**Expected Output: No. of Upper case characters: 3**

**No. of Lower case characters: 13**

def count\_upper\_lower(s):

upper\_case = sum(1 for char in s if char.isupper())

lower\_case = sum(1 for char in s if char.islower())

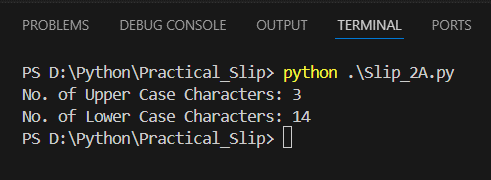
return upper\_case,lower\_case

sample\_string = 'Lalit Devidas Patil'

upper\_count, lower\_count = count\_upper\_lower(sample\_string)

print(f"No. of Upper Case Characters: {upper\_count}")

print(f"No. of Lower Case Characters: {lower\_count}")



**B) Write Python GUI program to create a digital clock with Tkinter to display the time.**

import tkinter as tk

import time

class DigitalClock:

def \_\_init\_\_(self, root):

self.root = root

self.root.title("Digital Clock")

self.root.geometry("400x200")

self.clock\_label = tk.Label(root, font=("times", 50, "bold"), bg="black", fg="white")

self.clock\_label.pack(anchor='center')

self.update\_clock()

def update\_clock(self):

current\_time = time.strftime("%H:%M:%S")

self.clock\_label.config(text=current\_time)

self.root.after(1000, self.update\_clock)

if \_\_name\_\_ == "\_\_main\_\_":

root = tk.Tk()

clock = DigitalClock(root)

root.mainloop()

