**INFORMATION & COMMUNICATION TECHNOLOGY DEPARTMENT**

**SESI 2: 2022/2023**

**FINAL ASSESSMENT: PRACTICAL TEST**

**SET 1**

|  |  |  |  |
| --- | --- | --- | --- |
| **COURSE CODE:** DFP40203 | **COURSE NAME:** PYTHON PROGRAMMING | | |
| NAME: GURMIT SINGH A/L GURNAM SINGH | | | |
| **REGISTRATION NO: 10DDT21F1022** | | **CLASS:DDT5A** | **DURATION:** 2 HOURS |
| |  | | --- | | **CLO1:** Construct Python application based on given scenario (P4,PLO3) | | | | |

**ANSWER : CODES**

**Question 1:**

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Description automatically generated

1. Yes, I have encounter the error.
2. It means that the module that it has imported doesn’t exist in the folder.

**main.py**

from parcel\_calculator import calculate\_price

# Get user input for parcel dimensions and weight

length = float(input("Enter parcel length in centimeters: "))

width = float(input("Enter parcel width in centimeters: "))

height = float(input("Enter parcel height in centimeters: "))

weight = float(input("Enter parcel weight in kilograms: "))

# Calculate parcel price using imported function

price = calculate\_price(length, width, height, weight)

# Print parcel price to user

print("The price of your parcel is: $", price)

1. **parcel\_calculator.py**

def calculate\_price(length, width, height, weight):

    volume = length \* width \* height

    if weight<=1:

        if volume<=5000:

            price = 3

        elif volume>=5001 and volume<=10000:

            price = 5

        elif volume>10000:

            price = 7

    elif weight>1 and weight <=5:

        if volume>=0 and volume <=5000:

            price = 5

        elif volume>=5001 and volume<=10000:

            price = 7

        elif volume>10000:

            price = 9

    elif weight>5:

        if volume<=5000:

            price = 7

        elif volume>=5001 and volume<=10000:

            price = 9

        elif volume>10000:

            price = 11

    return price

**Question 2:**

**gui\_parcel.py**

import tkinter  as tk

import parcel\_calculator

from database import \*

from tkinter import messagebox

class ParcelCalculatorGUI:

    def \_\_init\_\_(self, master):

        self.master = master

        master.title("Parcel Calculator")

        master.geometry("600x300")

        master.configure(bg="purple")

        font = ("Arial",15)

        font2 = ("Arial",25)

        # Create length input label and entry field

        self.length\_label = tk.Label(master, text="Welcome to Lelemove",font=font2,bg="purple",fg="white")

        self.length\_label.grid(row=0, column=0,columnspan=2)

        # Create length input label and entry field

        self.length\_label = tk.Label(master, text="Length (cm):",font=font,bg="purple",fg="white")

        self.length\_label.grid(row=1, column=0)

        self.length\_entry = tk.Entry(master,width=40,font=font)

        self.length\_entry.grid(row=1, column=1)

        # Create width input label and entry field

        self.width\_label = tk.Label(master, text="Width (cm):",font=font,bg="purple",fg="white")

        self.width\_label.grid(row=2, column=0)

        self.width\_entry = tk.Entry(master,width=40,font=font)

        self.width\_entry.grid(row=2, column=1)

        # Create height input label and entry field

        self.height\_label = tk.Label(master, text="Height:",font=font,bg="purple",fg="white")

        self.height\_label.grid(row=3, column=0)

        self.height\_entry = tk.Entry(master,width=40,font=font)

        self.height\_entry.grid(row=3, column=1)

        # Create weight input label and entry field

        self.weight\_label = tk.Label(master, text="Weight (kg):",font=font,bg="purple",fg="white")

        self.weight\_label.grid(row=4, column=0)

        self.weight\_entry = tk.Entry(master,width=40,font=font)

        self.weight\_entry.grid(row=4, column=1)

        # Create weight input label and entry field

        self.id\_label = tk.Label(master, text="Item id:",font=font,bg="purple",fg="white")

        self.id\_label.grid(row=5, column=0)

        self.id\_entry = tk.Entry(master,width=40,font=font)

        self.id\_entry.grid(row=5, column=1)

       # Create calculate button

        self.calculate\_button = tk.Button(master, text="Calculate", command=self.calculate\_price,width=15)

        self.calculate\_button.grid(row=7, column=0, columnspan=2)

        #Create insert button

        self.calculate\_button = tk.Button(master, text="Insert",command=self.insert\_data,width=15)

        self.calculate\_button.grid(row=8, column=0, columnspan=2)

        # Create price label

        self.price\_label = tk.Label(master, text="")

        self.price\_label.grid(row=6, column=0, columnspan=2)

    def calculate\_price(self):

            # Get parcel dimensions and weight from entry fields

            global length

            global width

            global height

            global weight

            global price

            global itemId

            global volume

            length = float(self.length\_entry.get())

            width = float(self.width\_entry.get())

            height = float(self.height\_entry.get())

            weight = float(self.weight\_entry.get())

            itemId = self.id\_entry.get()

            volume = length \* width \* height

            # Calculate parcel price using imported function

            price = parcel\_calculator.calculate\_price(length,width,height,weight)

            # Update price label with calculated price

            self.price\_label.config(text="The price of your parcel is: $" + str(price))

    def insert\_data(self):

        try:

            sql = "INSERT INTO package VALUES (%s,%s,%s,%s,%s,%s)"

            data = (str(itemId),str(height),str(width),str(length),str(volume),str(price))

            mycursor.execute(sql,data)

            messagebox.showinfo(message="Your application has been submitted",title="Record Success")

            mydb.commit()

        except:

            messagebox.showinfo(message="Fail enter data into database",title="Failed")

            mydb.rollback()

            print(str(itemId),str(height),str(width),str(length),str(volume),str(price))

master = tk.Tk()

parcel\_calculator\_gui = ParcelCalculatorGUI(master)

master.mainloop()

**Question 3:**

**database.py**

import mysql.connector

#create connection

mydb = mysql.connector.connect(

    user="root",

    host="localhost",

    password="",

    database="LelemoveSystem")

#create cursor

mycursor = mydb.cursor()

#create database

mycursor.execute("CREATE DATABASE IF NOT EXISTS LelemoveSystem")

table = """CREATE TABLE IF NOT EXISTS package(

Item\_id VARCHAR(10) PRIMARY KEY NOT NULL ,

Item\_height VARCHAR(5),

Item\_width VARCHAR(5),

Item\_length VARCHAR(5),

Item\_volume VARCHAR(10),

Item\_price VARCHAR(5))"""

mycursor.execute(table)

**ANSWER : OUTPUT**

**Question 1**

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**Question2,3**

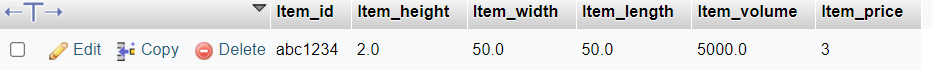
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**ANSWER: DATABASE SCREENSHOTS**

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