



اُونِيْوَرْسِيْتِيْ تِيْكْنُوْلُوْجِيْ مَآرَا  
UNIVERSITI  
TEKNOLOGI  
MARA

COLLEGE OF COMPUTING, INFORMATICS AND MATHEMATICS  
UNIVERSITI TEKNOLOGI MARA  
MERBOK, KEDAH

DIPLOMA IN LIBRARY INFORMATICS  
(IM144)

PROGRAMMING FOR LIBRARIES  
(IML208)

**INDIVIDUAL ASSIGNMENT: "INDIVIDUAL PROGRAM"**

PREPARED BY:  
BALQIS BATRISYIA BINTI AZHAROLKHAIR  
(2022818714)

CLASS:  
KCDIM1443F

PREPARED FOR:  
SIR AIRUL SHAZWAN BIN NORSHAHIMI

SUBMISSION DATE:  
4 JANUARY 2024

INDIVIDUAL ASSIGNMENT: "INDIVIDUAL PROGRAM"

BALQIS BATRISYIA BINTI AZHAROLKHAIR

2022818714

KCDIM1443F

COLLEGE OF COMPUTING, INFORMATICS AND MATHEMATICS

UNIVERSITI TEKNOLOGI MARA

MERBOK, KEDAH

4 JANUARY 2024



## STUDENT PLEDGE OF ACADEMIC INTEGRITY

As a student of Universiti Teknologi MARA (UiTM), it is my responsibility to act in accordance with UiTM's academic assessment and evaluation policy. I hereby pledge to act and uphold academic integrity and pursue scholarly activities inUiTM with honesty and responsible manner. I will not engage or tolerate acts of academic dishonesty, academic misconduct, or academic fraud including but not limited to:

- a. **Cheating:** Using or attempt to use any unauthorized device, assistance, sources, practice or materials while completing academic assessments. This include but not limited to copying from another, allowing others to copy, unauthorized collaboration on an assignment or open book tests, or engaging in any act or conduct that can be construed as cheating.
- b. **Plagiarism:** Using or attempts to use the work of others (ideas, design, words, art, music, etc.) without acknowledging the source; using or purchasing materials prepared by another person or agency or engaging in other behavior that a reasonable person would consider as plagiarism.
- c. **Fabrication:** Falsifying data, information, or citations in any academic assessment and evaluation.
- d. **Deception:** Providing false information with intend to deceive an instructor concerning any academic assessment and evaluation.
- e. **Furnishing false information:** Providing false information or false representation to any UiTM official, instructor, or office.

With this pledge, I am fully aware that I am obliged to conduct myself with utmost honesty and integrity. I fully understand that a disciplinary action can be taken against me if I, in any manner, violate this pledge.

A handwritten signature in black ink, appearing to read 'Balqis', is written over a horizontal line.

Name: BALQIS BATRISYIA BINTI AZHAROLKHAIR

Matric Number: 2022818714

Course Code: IML208

Programme code: CDIM144

Faculty / Campus : COLLEGE OF COMPUTING, INFORMATICS AND MATHEMATICS

\*Students are required to sign one pledge for each course taken.

## **ACKNOWLEDGEMENT**

First of all, I wanted to express my heartfelt gratitude to my family, particularly my parents, for their unwavering support in completing this assignment on time. It took a lot of effort on my part to complete it, but I couldn't have done it without the assistance of several key figures. This assignment would not have been completed without their assistance and direction, so I would like to thank everyone who has assisted me.

Thank you to SIR AIRUL SHAZWAN BIN NORSHAHIMI for directing me in the right direction and for his opinion that I should complete this task following the guidelines that we were given. A special thanks also goes to my classmates, who have been there for me throughout this process.

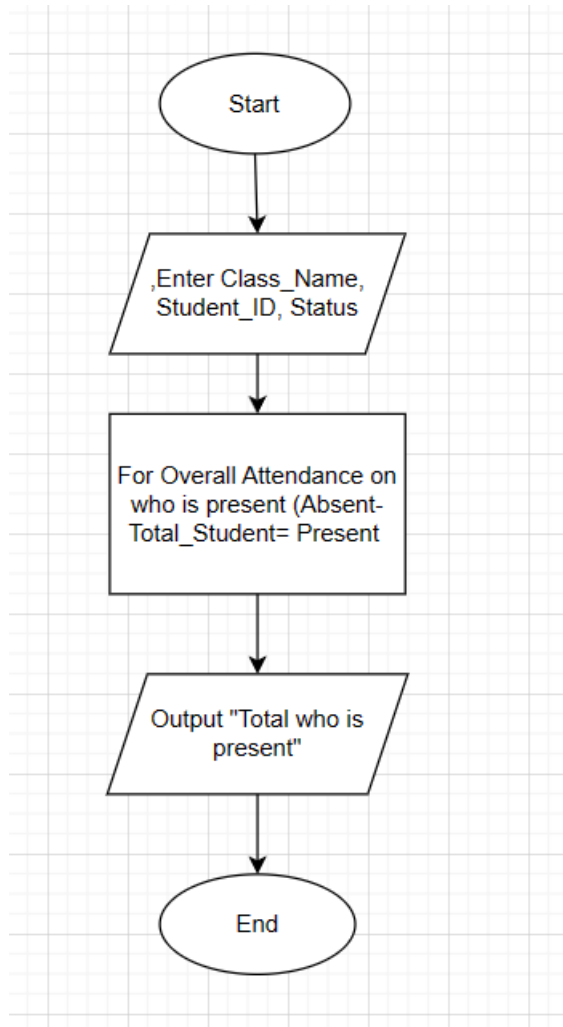
## Table of Contents

<b>ACKNOWLEDGEMENT</b> .....	4
1.0 Introduction.....	6
2.0 Flowchart .....	7
3.0 Code .....	8
4.0 GUI .....	9
5.0 Database.....	10
6.0 Conclusion .....	11

## 1.0 Introduction

In this individual assignment that has been given, I will be doing a program called "Student Attendance". The reason I made this program is because this can make the teacher key in the data about their student attendance easier as the report will be important for the school data. This also can make the teacher become more aware of how many of their absent student.

## 2.0 Flowchart



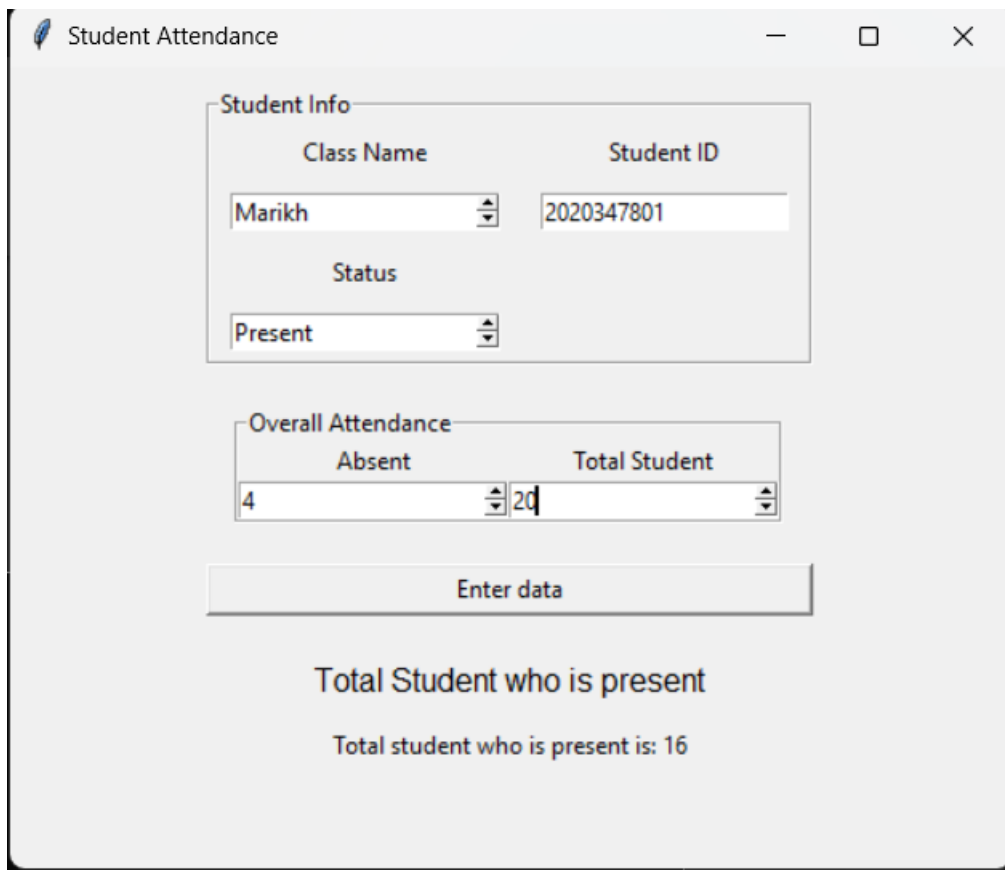
## 3.0 Code

```
attendance.py > ...
1  import tkinter as tk
2  import mysql.connector
3
4  # Connect to your MySQL database
5  mydb = mysql.connector.connect(
6      host="localhost",
7      user="root",
8      password="",
9      database="student_attendance"
10 )
11
12 mycursor = mydb.cursor()
13
14
15 def collect_data():
16
17     #student info
18     Class_Name = class_name_spinbox.get()
19     Student_ID = student_id_entry.get()
20     Status = status_spinbox.get()
21
22     #total
23     absent = int(absent_spinbox.get())
24     total_student = int(total_student_spinbox.get())
25
26     present = total_student - absent
27
28     #insert data into database
29     sql = "INSERT INTO attendance (Class_Name, Student_ID, Status, Absent, Total_Student, Present) VALUES (%s, %s, %s, %s, %s, %s)"
30     val = (Class_Name, Student_ID, Status, absent, total_student, present)
31     mycursor.execute(sql, val)
32     mydb.commit()
33
34     #output
35     output_label.config(text=f"Total student who is present is: {present}")
36
```

```
37 # Rest of your GUI code remains unchanged
38 window = tk.Tk()
39 window.title("Student Attendance")
40 window.geometry('500x400')
41
42 frame = tk.Frame(window)
43 frame.pack()
44
45
46 #student info
47 student_info_frame=tk.LabelFrame(frame, text= "Student Info")
48 student_info_frame.grid(row= 0, column=0, padx=20, pady=10)
49
50 #first frame
51 class_name_label = tk.Label(student_info_frame, text="Class Name")
52 class_name_spinbox = tk.Spinbox (student_info_frame, values=["", "Zuhal", "Marikh", "Musytari"])
53 class_name_label.grid(row=0, column=0)
54 class_name_spinbox.grid(row=1, column=0)
55
56 student_id_label = tk.Label(student_info_frame, text="Student ID")
57 student_id_label.grid(row=0, column=1)
58 student_id_entry = tk.Entry(student_info_frame)
59 student_id_entry.grid(row=1, column=1)
60
61 status_label = tk.Label(student_info_frame, text="Status")
62 status_spinbox = tk.Spinbox (student_info_frame, values=["", "Present", "Absent"])
63 status_label.grid(row=2, column=0)
64 status_spinbox.grid(row=3, column=0)
65
66 for widget in student_info_frame.winfo_children():
67     widget.grid_configure(padx=10, pady=5)
68
69 #second frame
70 overall_attendance_frame =tk.LabelFrame(frame, text="Overall Attendance")
71 overall_attendance_frame.grid(row= 1, column=0, padx=20, pady=10)
72
73 absent_label = tk.Label(overall_attendance_frame, text="Absent")
```



## 4.0 GUI



The image shows a Java Swing window titled "Student Attendance". It contains two main input sections. The first section, "Student Info", has a "Class Name" dropdown menu with "Marikh" selected, a "Student ID" text field with "2020347801", and a "Status" dropdown menu with "Present" selected. The second section, "Overall Attendance", has an "Absent" spinner field set to "4" and a "Total Student" spinner field set to "20". Below these is an "Enter data" button. At the bottom, the text "Total Student who is present" is displayed, followed by the calculated result "Total student who is present is: 16".

Student Attendance

Student Info

Class Name: Marikh

Student ID: 2020347801

Status: Present

Overall Attendance

Absent: 4

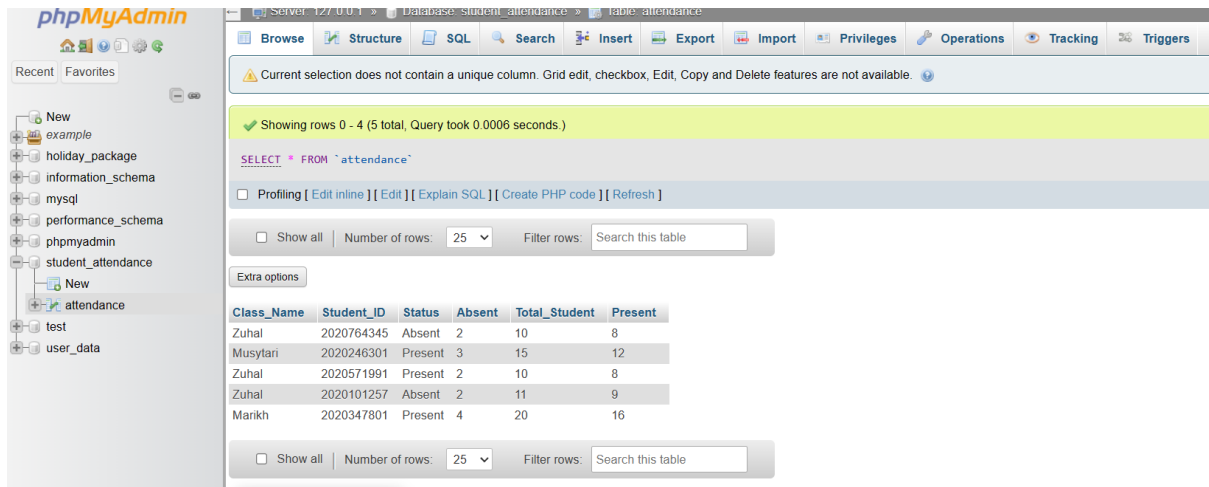
Total Student: 20

Enter data

Total Student who is present

Total student who is present is: 16

## 5.0 Database



The screenshot shows the phpMyAdmin interface. On the left is a sidebar with a tree view of databases and tables. The main area displays the 'attendance' table within the 'student\_attendance' database. A message at the top states: 'Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.' Below this, a green bar indicates 'Showing rows 0 - 4 (5 total, Query took 0.0006 seconds.)'. The SQL query 'SELECT \* FROM `attendance`' is shown. Below the query are links for 'Profiling', 'Edit inline', 'Edit', 'Explain SQL', 'Create PHP code', and 'Refresh'. There are controls for 'Show all', 'Number of rows' (set to 25), and a 'Filter rows' search box. An 'Extra options' button is also present. The table data is as follows:

Class_Name	Student_ID	Status	Absent	Total_Student	Present
Zuhal	2020764345	Absent	2	10	8
Musytari	2020246301	Present	3	15	12
Zuhal	2020571991	Present	2	10	8
Zuhal	2020101257	Absent	2	11	9
Marikh	2020347801	Present	4	20	16

At the bottom, there are again controls for 'Show all', 'Number of rows' (set to 25), and a 'Filter rows' search box.

## 6.0 Conclusion

In conclusion, this assignment has made me more dependent on how to do certain things and make more use of the internet than I could have imagined. But with self-learning, this assignment has made me more knowledgeable than before. In the end, I couldn't have finished this assignment without the help of my precious friends, my lecturer and ChatGPT; without them, I couldn't have imagined finishing this assignment.