DAV PUBLIC SCHOOL
JEHANABAD

Student's Name: ***Bhavya Sharma.***

Class: 10 'G'

Roll Number: 37

Subject: ***Artificial Intelligence***

Date: __ /__ / 202_

Session: **2025-26**

CERTIFICATE

OF COMPLETION

This is to certify that the project titled

'Marks Calculator'

has been completed by

Bhavya Sharma of class **X 'G'**

as a vital component of the **Artificial Intelligence** curriculum for the **2025-26** academic year.

This project, which demonstrates the principles of Python programming, open-source software development, and modern version control systems, was successfully executed under my esteemed guidance.

_____	_____
Mr Dinesh Kumar	Mr K.K. Pandey
Subject Teacher	Principal

DAV Public School,

Jehanabad

Date: ___ / ___ / 202__

ACKNOWLEDGEMENT

I wish to express my sincere gratitude and profound appreciation to all those who extended their invaluable support and guidance throughout the completion of my practical project.

Firstly, I am immensely thankful to my esteemed teacher, **Mr Dinesh Kumar,** for their invaluable guidance, insightful suggestions, and unwavering encouragement. Their profound knowledge and ability to clarify complex concepts were instrumental in shaping this project and deepening my understanding of modern computing principles.

This project, **'Marks Calculator,'** provided an exceptional opportunity to delve into the practical application of programming and open-source methodologies. It significantly enhanced my understanding of open-source principles, version control with Git and GitHub, and professional development practices within an open-source programming environment, VS Code. This choice of environment not only aligns perfectly with the open-source philosophy but also adheres to the *official **CBSE** recommendations* for computing environments in schools, truly embedding the open-source ethos from the ground up.

I am also grateful to our respected principal, **Mr K.K. Pandey**, and the entire school management of **DAV Public School,** Jehanabad, for providing us with the necessary resources and a conducive learning environment to undertake such challenging and enriching projects.

Finally, I extend my heartfelt thanks to my parents for their continuous motivation, patience, and unwavering support, which kept me inspired throughout this endeavour.

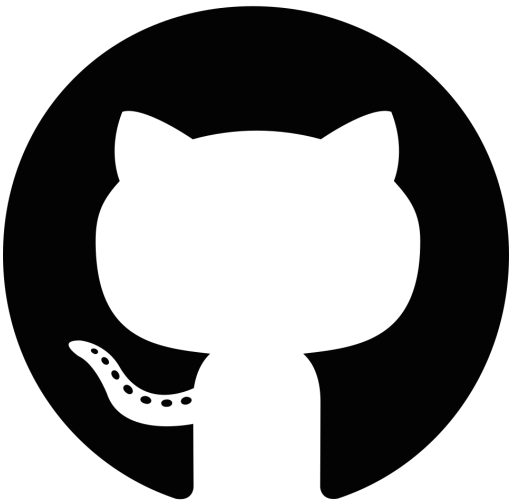
Bhavya Sharma

Class X 'G'

Roll Number 37

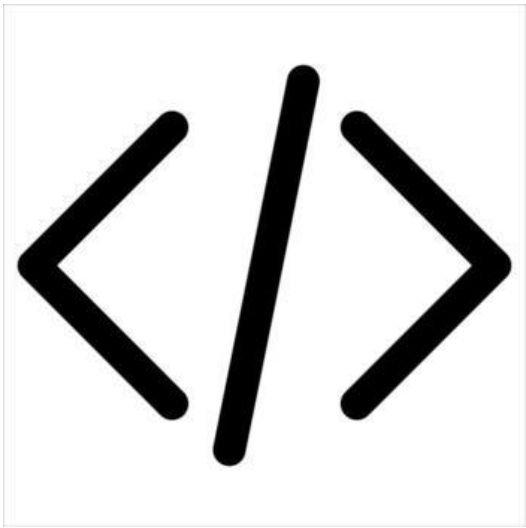
INDEX

1. Acknowledgement .ii
2. Index .iii
3. Introduction 04
4. Project Overview 04
5. GitHub Repository Details 05
6. Deployment and Code Review 06
7. Program Execution : Output 09
8. Conclusion .xii
9. Bibliography .xii



1. Introduction

This document presents an open-source Python project: A **Marks Calculator**. Developed to provide users with a robust tool for calculating the marks or the result of the examination in a much faster, easier and more accurate way. This project serves as a practical demonstration of open-source development principles, version control using **GitHub**, and the execution of a Python program on an **Integrated Development Environment**.

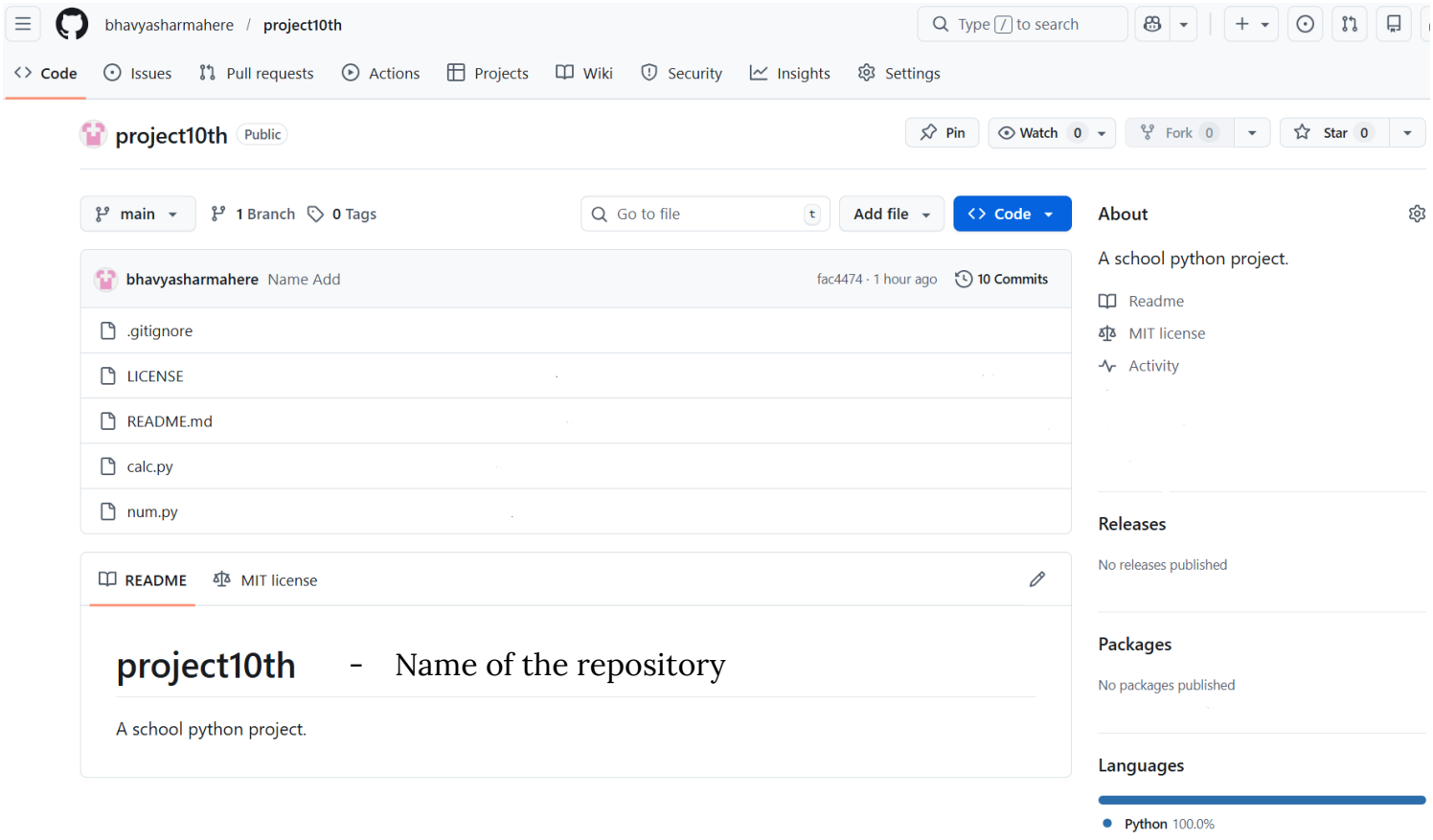


2. Project Overview

The **Marks Calculator** is a command-line utility designed to give calculated results tailored to user-specified criteria. It offers flexibility in class. This makes the calculation of the result faster and easier. As an open-source project, its code is publicly available on **GitHub** under the **MIT License**, fostering transparency, collaboration, and community-driven improvements. **VS Codium** has been used to write the program, and **Google Colab** has been used to run this program.

3. GitHub Repository Details

This screenshot displays the main page of the project10th repository on GitHub. It confirms the project's public status, making it accessible for anyone to view, clone, and contribute. Key elements visible are the repository name, a brief description, the auto-generated README.md file (which provides essential project information), the .gitignore file (for Python projects), and most importantly, the **MIT License**. The MIT License clearly defines the terms under which this software can be freely used, modified, and distributed, affirming its open-source nature.



GitHub Repository: github.com/bhavyasharmahere/project10th

4. Deployment & Code Review

- **4.1 Deployment by cloning the repository from GitHub**

  In this critical step, we download the Python file (calc.py) from the publicly available GitHub repository. Then we will use a local Integrated Development Environment (IDE) for the code deployment and review.

project10th / calc.py

bhavyasharmahere V-F

Code Blame 64 lines (60 loc) · 2.4 KB

```
1   # Program: Marks Calculator
2   # Author: Bhavya Sharma
3   # Marks Calculator for Exam Result
4
5   # Student Details
6   name = input("Enter Name: ")
7   student_class = int(input("Enter Class: "))
8
9   if student_class <=8 :
10      section = input("Enter Section: ")
11      # m Input
12      print("\nEnter maximum Marks for each subject:")
13      m_comp = int(float(input("Computer: ")))
14      m_ma = int(float(input("Mathematics: ")))
15      m_sc = int(float(input("Science: ")))
16      m_ss = int(float(input("Social Studies: ")))
17      m_eng = int(float(input("English: ")))
```

Raw file content
Download Ctrl shift s
Jump to line l
Copy path Ctrl shift .
Copy permalink Ctrl shift ,
View options
✓ Show code folding buttons
Wrap lines
Center content

- **4.2 Reviewing the Cloned Source Code**

  After successfully cloning the Python file to the local machine, the project's source code, calc.py, is opened and reviewed in a local Integrated Development Environment (IDE).

  This enables detailed local inspection and a thorough understanding of the code. The screenshot below displays the Python code as it appears in the IDE

  (here I am using Google Colab Codium).

By Bhavya Sharma

```
# Program: Marks Calculator
# Author: Bhavya Sharma
# Marks Calculator for Exam Result

# Student Details
name = input("Enter Name: ")
student_class = int(input("Enter Class: "))

if student_class <=8 :
    section = input("Enter Section: ")
    # m Input
    print("\nEnter maximum Marks for each subject:")
    m_comp = int(float(input("Computer: ")))
    m_ma = int(float(input("Mathematics: ")))
    m_sc = int(float(input("Science: ")))
    m_ss = int(float(input("Social Studies: ")))
    m_eng = int(float(input("English: ")))
    m_s = int(float(input("Sanskrit: ")))
    m_h =  int(float(input("Hindi: ")))
    # Score Input
    print("\nEnter Marks You Obtained:")
    c = int(float(input("Computer: ")))
    ma = int(float(input("Mathematics: ")))
    sc = int(float(input("Science: ")))
    ss = int(float(input("Social Studies: ")))
    eng = int(float(input("English: ")))
    s= int(float(input("Sanskrit: ")))
    h=  int(float(input("Hindi: ")))
    # Net Calculations
    total_m = m_comp + m_ma + m_sc + m_ss + m_eng + m_s + m_h
    total_obtained = c + ma + sc + ss + eng + s + h
    percentage = (total_obtained / total_m) * 100
    # Final Output
    print( name, "of" , student_class , section , "has scored totally" ,
    total_obtained , "out of" , total_m , "and final score is", percentage ,
    "%")
    print("\n")
    print("Program Ends Here")
```

```
else:
    section = input("Enter Section: ")
    # m Input
    print("\nEnter mimum Marks for each subject:")
    m_ai = int(float(input("Artificial Intelligence or IT: ")))
    m_ma = int(float(input("Mathematics: ")))
    m_sc = int(float(input("Science: ")))
    m_ss = int(float(input("Social Studies: ")))
    m_eng = int(float(input("English: ")))
    m_l = int(float(input("Sanskrit/Hindi: ")))
    # Score Input
    print("\nEnter Marks Obtained:")
    ai = int(float(input("AI or IT: ")))
    ma = int(float(input("Mathematics: ")))
    sc = int(float(input("Science: ")))
    ss = int(float(input("Social Studies: ")))
    eng = int(float(input("English: ")))
    l = int(float(input("Sanskrit/Hindi: ")))
    # Net Calculations
    total_m = m_ai + m_ma + m_sc + m_ss + m_eng + m_l
    total_obtained = ai + ma + sc + ss + eng + l
    percentage = (total_obtained / total_m) * 100
    # Final Output
    print( name, "of" , student_class , section , "has scored totally" ,
    total_obtained , "out of" , total_m , "and final score is", percentage ,
    "%")
    print("\n")
    print("Program Ends Here")
```

This is the screenshot of the local Integrated Development Environment (IDE), Google Colab Codium.

5. Program Execution : Output

Following the successful cloning and local review, this screenshot illustrates the execution of the calc.py script on the local machine. It captures the user's interaction with the program, where they input the desired input, i.e. the basic details like name, class, section, maximum marks, and marks obtained.

The program then processes these inputs and displays the calculated marks. This final step confirms the project's successful local deployment and verifies its intended functionality as an effective marks calculation utility.

This program has been run on Google Colab online codium to derive the output.

OUTPUT: 01

```
Enter Name: Jhon
Enter Class: 5
Enter Section: D

Enter maximum Marks for each subject:
Computer: 20
Mathematics: 20
Science: 20
Social Studies: 20
English: 20
Sanskrit: 20
Hindi: 20

Enter Marks You Obtained:
Computer: 19
Mathematics: 20
Science: 20
Social Studies: 15
English: 12
Sanskrit: 20
Hindi: 17.5
Jhon of 5 D has scored totally 123 out of 140 and final score is 87.85714285714286 %


Program Ends Here
```

OUTPUT: 02

```
Enter Name: Albert
Enter Class: 10
Enter Section: H

Enter maximum Marks for each subject:
AI or IT: 50
Mathematics: 80
Science: 80
Social Studies: 80
English: 80
Sanskrit/Hindi: 80

Enter Marks Obtained:
AI or IT: 50
Mathematics: 78
Science: 77
Social Studies: 69
English: 72
Sanskrit/Hindi: 59


Albert of 10 H has scored totally 405 out of 450 and final score is 90.0 %


Program Ends Here
```

OUTPUT: 03

```
Enter Name: Fatima
Enter Class: 8
Enter Section: C

Enter maximum Marks for each subject:
Computer: 80
Mathematics: 80
Science: 80
Social Studies: 80
English: 80
Sanskrit: 80
Hindi: 80

Enter Marks You Obtained:
Computer: 48
Mathematics: 50
Science: 57
Social Studies: 73
English: 72
Sanskrit: 33
Hindi: 36.5
Fatima of 8 C has scored totally 369 out of 560 and final score is 65.89285714285714 %


Program Ends Here
```

6. Conclusion

This project successfully demonstrates the practical workflow of utilising open-source software. The focus of this endeavour was not on creating a new application from scratch, but on the equally important skill of sourcing, understanding, and implementing an existing project from the global open-source community.

As documented, the '**Marks Calculator**' was identified on GitHub, and its public, open-source nature was confirmed by its MIT License. The entire process—from cloning the repository using the git clone command to reviewing the source code in an **Integrated Development Environment (IDE)** - was strictly followed by professional development practices. Finally, the successful execution of the script confirmed my understanding of the code and its functionality.

This approach has given me invaluable hands-on experience. It has trained me to be familiar with GitHub, know the concept of code retrieval using version control, and be able to operate in the open-source world. It is an extremely important set of concepts for any student pursuing a career in the realm of Artificial Intelligence, given the very nature of AI development in the modern era, relying on and contributing to the world of open sources. This particular assignment has given me an immense appreciation for the community spirit behind the world of open source.

---

7. Bibliography

- **Google Colab** - A cloud-based service to run Python code.
- **VS Code** - Code editor used to write the program.
- **GitHub** - For uploading the repository publicly.
- **Teacher's Class Notes**
- **Python Programming Notes**
- **Artificial Intelligence (Code 417), Sumita Arora**