Synopsis of MarkSheet Generator

AIM

The aim of the Marksheet Generation System is to develop a simple console-based application in Ruby that automates the process of calculating and displaying student marksheets.

OBJECTIVE

1) To allow user to enter their details.
2) Compute total marks, percentage, and grade.
3) Minimize the errors in computation of the grades.
4) Display a structured marksheet in the console.

INTRODUCTION

The Marksheet Generation System is a simple console-based application developed in Ruby that automates the process of calculating and displaying student marksheets. This application allows users to input student details and subject-wise marks, processes the data, and generates a structured marksheet with total marks, percentage, and grade.

PROPOSED SYSTEM / WORKING

The **Marksheet Generation System** is a **console-based Ruby application** that takes input from the user, processes the data, and generates a marksheet with results. The working process is as follows:

1. **User Input:**
    - The user enters student details such as **Name, Roll Number, Class, and Number of Subjects**.
    - The user then provides details for each subject, including **Subject Name, Maximum Marks, and Obtained Marks**.
2. **Processing:**
    - The system calculates the **total marks** obtained by the student.
    - It computes the **percentage** based on the total marks.

- The **CGPA** is determined from the percentage.
- The **final grade** is assigned based on the CGPA using predefined grading criteria.

3. **Output:**
    - The system displays the **Marksheet** with all details, including the **student's Name, Roll Number, Subject-wise Marks, Total Marks, Percentage, CGPA, and Final Grade**.

This automation ensures accuracy, reduces manual errors, and provides a structured and readable marksheet.

CONCLUSION

The **Marksheet Generation System** is a simple yet effective **console-based application in Ruby** that automates the process of calculating student results.

This project eliminates manual calculation errors and provides a **structured, user-friendly** way to generate marksheets. It can be further enhanced with additional features such as **data storage, report generation, and graphical representation of results**.

Overall, this project serves as a **reliable and efficient** solution for generating student marksheets with minimal effort.