



MINI PROJECT BASED ON C PROGRAMMING

TITLE: PRINTING UNIVERSITY MARKS CARD

SF ID:104351

EMAIL-ID:

sanjurevan98@gmail.com

SUBMITTED BY:

R SANJANA

TABLE OF CONTENTS:

Serial No.	Contents	Page No.
1.	Problem Statement	3
2.	Description	4
3.	Requirements	6
4.	Test Cases	7
5.	Expected Results	8

PROBLEM STATEMENT:

To develop a C project for printing university marks card by calculating the grades and cgpa from the students details provided at the input.

DESCRIPTION:

- The programming language used to develop this project is C language. The concepts used to develop the code is structure, if else statements, for loop statements.
- Structure is another user defined data type available in C that allows to combine data items of different kinds. To define a structure, you must use the struct statement. The struct statement defines a new data type, with more than one member.
- An if statement can be followed by an optional else statement, which executes when the Boolean expression is false. If the Boolean expression evaluates to true, then the if block will be executed, otherwise, the else block will be executed.
- A for loop is a repetition control structure that allows you to efficiently write a loop that needs to execute a specific number of times.
- In this program we have declared a structure with structure name called subject with structure variables slno in integer, course_code as string, course as string, num as integer, credit_ass as integer, credit_earn as integer, letter_grade as character, grade_points as integer.
- The structure called subject is declared with variable s1 which is an array of size five(5).

- We have also declared some more variables in main function to calculate SGPA,CGPA, total credits earned that is to be printed in the marks card.
- We give information of the student's personal details, student's score displayed on the console through keyboard.
- We input name of the student, course code, subject name, marks through keyboard.
- By using for loop we check for assigning of grade for different by giving marks as input through else if condition.
- Similarly, we assign credits earned to different subject and also grade points of different subjects and close the for loop.
- By using another for loop, we calculate the total credits earned, total summation of product of credits earned and grade points.
- We have also written the code for sgpa and cgpa.

REQUIREMENTS:

1. HARDWARE REQUIREMENTS:

- RAM : 4 GB
- Processor : Pentium and more
- Hard Disk Drive : 500 GB
- Speed : 2.5 GHz
- Keyboard : USB keyboard

2. SOFTWARE REQUIREMENTS:

- Operating system : Windows OS
- Software used : codeblocks
- Programming Language(Frontend) : C

TEST CASES:

TEST CASE(1):

Enter the student details like name,father/mother name,university
Seat number.

TEST CASE(2):

Enter the student examination details like number of courses, course
code,course name and marks obtained in each courses.

TEST CASE(3):

Calculating grades by the details obtained from the input and
assigning grade points.

TEST CASE(4):

Calculating cgpa by considering the sgpa of the previous semester
exams.

EXPECTED RESULTS:

By obtaining the student details and student examination details, the grades and cgpa are auto-calculated and the marks cards is printed.

