Experiment No. 1

Class and Div: Mech & F

Batch: B

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RollNo.: 47

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Aim:

Mark Sheet Generation System Create a C program that simulates a college mark sheet generation system. The program should collect student details such as name, roll number, and marks in three subjects, then display the result in a formatted manner. Use various C input/output functions like scanf(), printf(), getchar(), putchar(), gets(), and puts() to demonstrate basic console-based data handling.

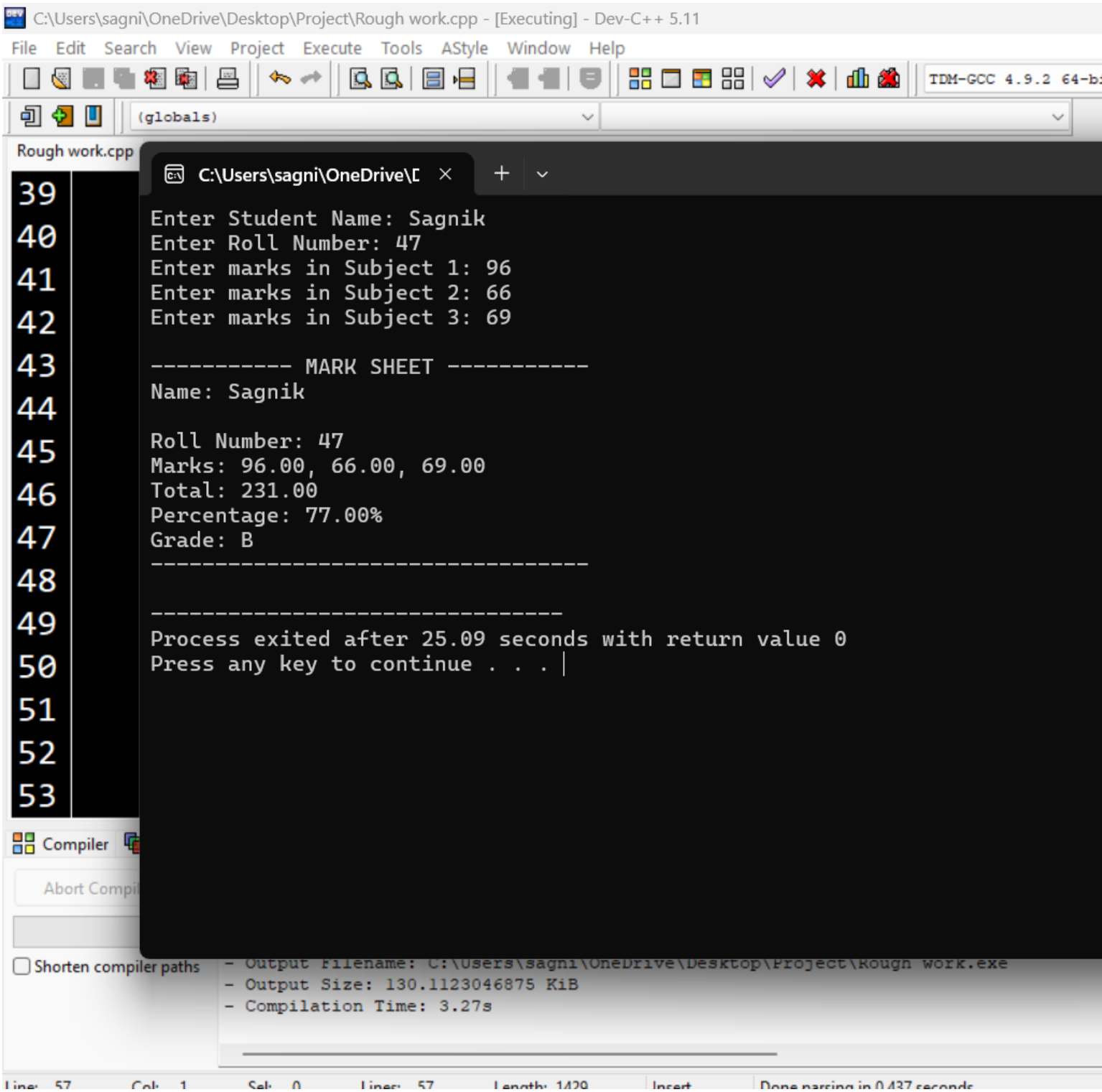
ProgramCode:

```
#include <stdio.h>

int main() {
    char name[50];
    int roll;
    float m1, m2, m3, total, percent;
    char grade;

    // Input using fgets()
    printf("Enter Student Name: ");
    fgets(name, sizeof(name), stdin);     // safer input

    // Using scanf()
    printf("Enter Roll Number: ");
    scanf("%d", &roll);

    printf("Enter marks in Subject 1: ");
    scanf("%f", &m1);

    printf("Enter marks in Subject 2: ");
    scanf("%f", &m2);

    printf("Enter marks in Subject 3: ");
    scanf("%f", &m3);

    // Calculations
    total = m1 + m2 + m3;
    percent = total / 3.0;

    // Grade Calculation
    if (percent >= 90) grade = 'A';
```

```
    else if (percent >= 75) grade = 'B';
    else if (percent >= 60) grade = 'C';
    else if (percent >= 40) grade = 'D';
    else grade = 'F';

    // Output using printf(), puts(), putchar()
    printf("\n---------- MARK SHEET ----------\n");

    printf("Name: ");
    puts(name);                    // prints string with newline

    printf("Roll Number: %d\n", roll);
    printf("Marks: %.2f, %.2f, %.2f\n", m1, m2, m3);

    printf("Total: %.2f\n", total);
    printf("Percentage: %.2f%%\n", percent);

    printf("Grade: ");
    putchar(grade);                // prints a single character
    putchar('\n');                 // newline

    printf("---------------------------------\n");

    return 0;
}
```

Output:(Twosamples)

Experiment No. 1



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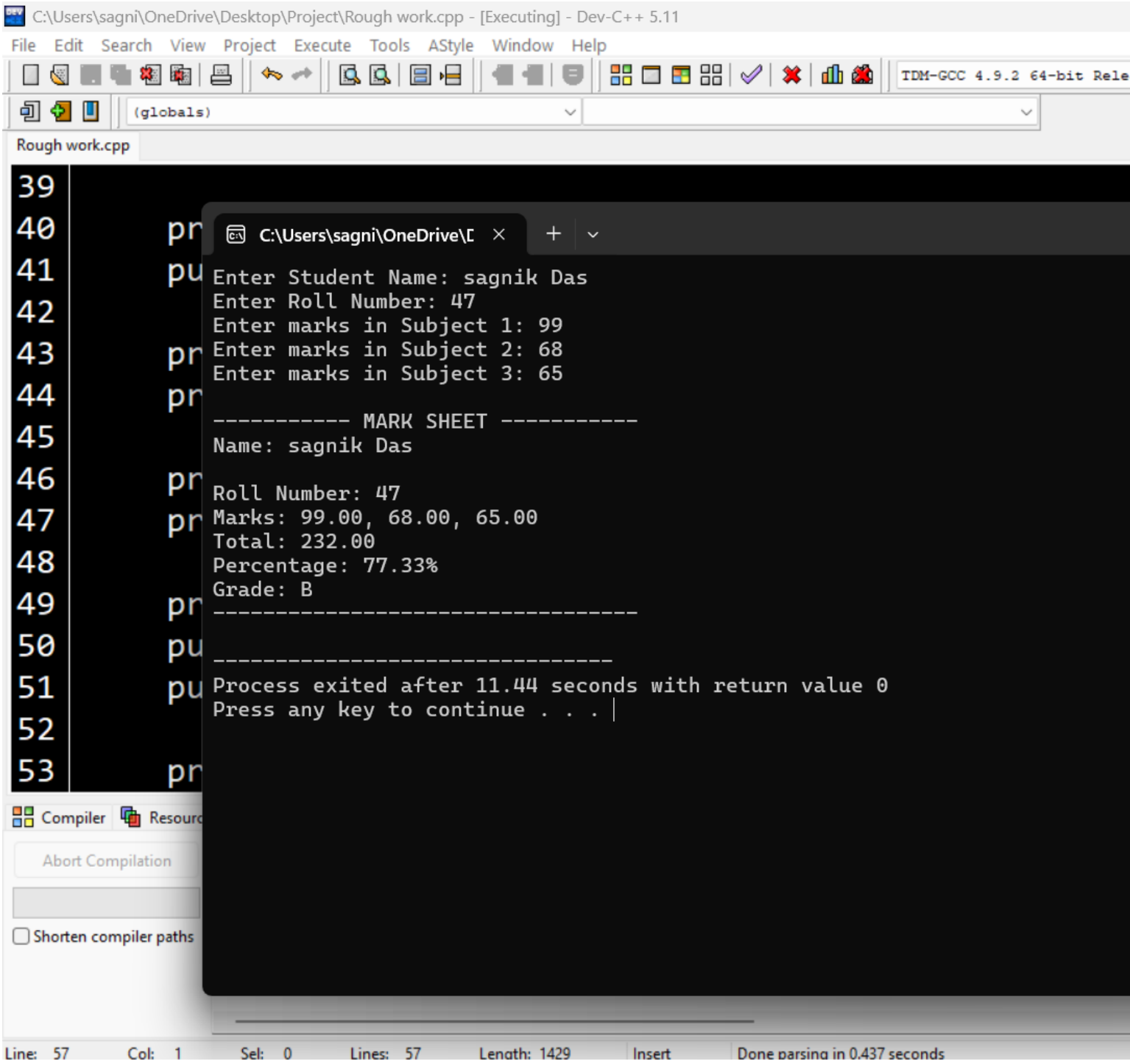

Conclusion:

This experiment helped in understanding C input/output functions, handling various data types, simple calculations and generating a formatted mark sheet. It reinforced basic programming concepts and result presentation skills.