



ಭಾರತೀಯ ಮಾಹಿತಿ ತಂತ್ರಜ್ಞಾನ ಸಂಸ್ಥೆ ರಾಯಚೂರು  
भारतीय सूचना प्रौद्योगिकी संस्थान रायचूर  
Indian Institute of Information Technology Raichur

### Lab - 9

Introduction to Programming  
(ID110) Date: February 8, 2025  
Topics: File Handling

Time: 1.5 Hr

CSE'24, Semester - I

Max marks: 10

#### Instructions:

- The lab session consists of **two programming questions**, and **both are mandatory**.
- External materials (e.g., notes, books) and electronic devices (e.g., mobile phones, smart watch, bluetooth) are **strictly prohibited**. Only a **blank sheet of paper** and a **pen** may be used for rough work.
- Internet usage is **not allowed** under any circumstances. Any violations will lead to **serious academic consequences**, including potential disqualification from the lab.
- Any form of **plagiarism or academic dishonesty** will be treated with the utmost seriousness and may result in severe penalties, including a zero for the lab or further disciplinary actions.
- Code must be written from scratch during the session. Pre-written code snippets or solutions will not be accepted. Use meaningful variable names and add appropriate comments where necessary.
- Upon completion, **two code files** named after **roll no.** (e.g., "CS24B1001-Lab9-p1.c" and "CS24B1001-Lab9-p2.c") must be submitted on **Google Classroom**. Not following the naming convention will lead to **minus marking**. The submission will only be accepted if done in the presence of TA.

1. Help your friend Abhay who decodes the binary value by noting down in notes and converting the information in strings. so, help him to print the binary values in a string using a text file which we will provide you.

(Use binary to string function to convert the values otherwise you'll lose 2 marks)

#### Input Format:

- A **.txt** file

#### Output Format:

- Binary values converted into strings.

**Examples:**

■ **Input:** testcase1.txt file

**Output:** Hello Friends.

■ **Input:** testcase2.txt file

**Output:** Output will be provided in the exam hall.

(5 marks)

2. There is a friend of mine, Manikanta, a B.P.C Faculty, who is trying to note down students' information of his class, now write a C program to help him to store the students info in the word file(students.txt). The Columns are Student Id, Student Name, Student Roll No, Student Branch.

(+2 Marks Bonus)also write a function so that using the student name then press(f) to find **index number**, Using the student roll no then press(r) to find **index number** same as using the student Id then press(i) to find **index number** and finally for exit this loop press(e).

[Note: the bonus will be added with 3 marks not with 5 marks].

**Input Format:**

- enter a integer *n* which represents the no of students
- enter the data
- first an integer of student id.
- secondly the string where you can store name
- thirdly an integer to store the student roll number
- finally the string which contains branch

**Output Format:**

- The output should store the values in a .txt file.
- Enter a character to find the student in the txt file whether the student is present as given information.

**Examples:**

■ **Input:** Enter the number of students: 3

Enter details for Student 1:  
Student ID: 101  
Student Name: Alice Johnson  
Roll No: 201  
Branch: CS

Enter details for Student 2:  
Student ID: 102  
Student Name: Bob Smith  
Roll No: 202  
Branch: IT

Enter details for Student 3:  
Student ID: 103  
Student Name: Charlie Brown  
Roll No: 203  
Branch: EE

**Output:**

S.No, Student ID, Student Name, Roll No, Branch  
1, 101, Alice Johnson, 201, CS  
2, 102, Bob Smith, 202, IT  
3, 103, Charlie Brown, 203, EE  
Data successfully entered.

f  
Enter Student Name: Alice Johnson

Student found at index: 1.

f  
Enter Student Name: David Miller

Student not found!

r  
Enter Roll No: 202

Student found at index: 2.

i  
Enter Student ID: 103

Student found at index: 3.

i  
Enter Student ID: 500

Student not found!

x  
Invalid choice! Please try again.

e

Exit.

(5 marks)

**All the Best!**