

Lab 10

Objectives

After performing this lab, students will be able to

- Understand filing in C++

Exercises

1. Write a C++ program that asks the user to input the following details of a student

student_ID, name, email_address, department, phone_number

Then, save these entered details in a file named “**student.txt**” and ask the user if he/she wants to enter any new record. If the user enters ‘Y’, then repeat the process again and save/append the newly entered record’s details in the file. If the user enters ‘N’, then the program should exit. See the sample output below:

```
Enter a student record

Enter ID: 13890
Enter name: Aslam Khan
Enter email address: aslam.khan@iba-suk.edu.pk
Enter department: Computer Science
Enter phone number: 123456789

Do you want to enter new record (Y/N)?
```

2. Extend the code of task 1 to store the data in a well-formatted manner as shown below:

Aslam Khan	13890	aslam.khan@iba-suk.edu.pk	Computer Science	123456789
Kamran Ali	45321	kamran.ali@iba-suk.edu.pk	Business Admin.	987654321
Muhsin Ali	67893	muhsin.ali@iba-suk.edu.pk	E. Engineering	690321584

3. Read the data from the file created in the previous task and show it on the screen

4. Write a C++ program for billing system of a restaurant. The program should perform the following tasks:

- Show menu of items/dishes to customers

- It should allow customers to select multiple items (by showing menu again and again continuously until he/she selects the “Quit” option)
- Finally, when the customer quits, it should prepare the bill (containing the details of all the orders and the total) **and save it in a file named “bills.txt”.**

Assume that the following items are offered in the restaurant

Dish/Item Name	Price
Omelet	\$1.45
French Omelet	\$2.45
Muffin	\$0.99
French Toast	\$1.99
Fruit Basket	\$2.49
Cereal	\$0.69
Coffee	\$0.75
Tea	\$0.50

- **Note:** The billing amount should also include a 5% tax.

5. Create a file named “dummy.txt” manually and store any text of 500 words and perform following operations:

- Read the contents of that file and print that on the screen.
- Display the count of total letters, words, sentences, and lines in that file.