

# Aror University of Art, Architecture, Design & Heritage Sukkur.

# Department of Artificial Intelligence and Multimedia Gaming <u>Fundamentals of Programming (Fall-2023)</u>

## LAB No. 12

## Prepared by: Abdul Haseeb Shaikh

#### Objective of Lab No. 12:

After performing lab 12, students will be able to:

- O Define structures in C++
- o Define data members and member functions of structures
- o Assign and Access Members of Structure

#### Lab Exercises:

#### Task 1: Employee Payroll System

- 1. Create a structure named "Employee" containing employee ID, name, designation, and salary.
- 2. Create a member function called employee\_info to display information about an employee.
- 3. In Main function create an array of type Employee having size 3, Input the details of 3 employees from the user.
- 4. Implement a function called employee\_highest which takes an array of type Employee and displays the details of the employee having highest salary.

#### **Task 2: Contact Management System**

- 1. Define a structure named "Contact" with members for name, phone number, and email.
- 2. Develop functions to add a new contact, display all contacts, and search for a contact by name or phone number.

#### **Task 3: Bank Account Management**

1. Define a structure named "Account" containing account number, account holder name, and balance.



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2. Develop functions for deposit, withdrawal, and display balance using this structure.

### **Task 4: Movie Database using Structures**

- 1. Create a structure named "Movie" with members for title, director, year, and genre.
- 2. Create a member function called display\_movie, to display information about a movie.
- 3. Write a program to input details for five movies and store them in an array of type "Movie".
- 4. Display movies released after a certain year entered by the user.