**Experiment: 9**

PART B

(PART B: TO BE COMPLETED AND SUBMITTED BY STUDENTS)

Students must execute all the programs, write executed code in the workbook, and submit part B of experiment 6 on the student portal. The filename should be **PPS\_batch\_rollno\_experimentno. Example: PPS\_A1\_A001\_P9**

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| --- | --- |
| **Roll No.:** | **Name:** |
| **Prog/Yr/Sem:** | **Batch:** |
| **Date of Experiment:** | **Date of Submission:** |

**Aim:** Programming using object-oriented programming concepts (using data members and member functions)

**Tasks:**

* + - 1. Create a class named 'Employee' with a string (char array) variable 'name' and float variable 'salary'. Assign the value of salary as 20000.67 and that of name as "Scott" in main( ) function by creating an object of the class Employee and display the same.
      2. Create a class Employee having data members name, salary & department and define two member function getData( ) & showData( ) for taking input & display the same. Write a complete C++ code for displaying the information of a Employee.
      3. Create a student record (name, rollno, marks of 3 subjects and score), calculate the average, store average in a score data member. If score<40, declare FAIL else PASS along with student details, maintain 10 students records. (make use of member function to read and display records)
      4. Write a program to overload sum function to perform addition of two integers, three integers and two floating-point numbers.
      5. Create a class named “Shapes” with data member area. Write a member function “calArea” with two float parameters to calculate the area of rectangle and overload the same function having one float parameter to calculate the area of square.

**Executed Code, Input and Output**

|  |  |
| --- | --- |
|  | Create a class named 'Employee' with a string (char array) variable 'name' and float variable 'salary'. Assign the value of salary as 20000.67 and that of name as "Scott" in main( ) function by creating an object of the class Employee and display the same. |
| **Executed Code: -**  // Paste the executed code here  **Input Output: -**  // Paste the input/output of executed code | |
|  | Create a class Employee having data members name, salary & department and define two member function getData( ) & showData( ) for taking input & display the same. Write a complete C++ code for displaying the information of a Employee. |
| **Executed Code: -**  // Paste the executed code here  **Input Output: -**  // Paste the input/output of executed code | |
|  | Create a student record (name, rollno, marks of 3 subjects and score), calculate the average, store average in a score data member. If score<40, declare FAIL else PASS along with student details, maintain 10 students records. (make use of member function to read and display records) |
| **Executed Code: -**  // Paste the executed code here  **Input Output: -**  // Paste the input/output of executed code | |
|  | Write a program to overload sum function to perform addition of two integers, three integers and two floating-point numbers. |
| **Executed Code: -**  // Paste the executed code here  **Input Output: -**  // Paste the input/output of executed code | |
|  | Create a class named “Shapes” with data member area. Write a member function “calArea” with two float parameters to calculate the area of rectangle and overload the same function having one float parameter to calculate the area of square. |
| **Executed Code: -**  // Paste the executed code here  **Input Output: -**  // Paste the input/output of executed code | |
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