

===== Level 1 =====

1.

Write a program to print the area of a rectangle by creating a class named 'Area' having two methods. First method named as 'setDim' takes length and breadth of rectangle as parameters and the second method named as 'getArea' returns the area of the rectangle. Length and breadth of rectangle are entered through keyboard.

2.

Create a class named 'Student' with String variable 'name' and integer variable 'roll_no'. Assign the value of roll_no as '2' and that of name as "John" by creating an object of the class Student.

3.

Assign and print the roll number, phone number and address of two students having names "Sam" and "John" respectively by creating two objects of class 'Student'.

4.

Write a program to print the area and perimeter of a triangle having sides of 3, 4 and 5 units by creating a class named 'Triangle' without any parameter in its constructor.

5.

Write a program to print the area and perimeter of a triangle having sides of 3, 4 and 5 units by creating a class named 'Triangle' with constructor having the three sides as its parameters.

6.

Write a program to print the area of two rectangles having sides (4,5) and (5,8) respectively by creating a class named 'Rectangle' with a method named 'Area' which returns the area and length and breadth passed as parameters to its constructor.

7.

Write a program to print the area of a rectangle by creating a class named 'Area' taking the values of its length and breadth as parameters of its constructor and having a method named 'returnArea' which returns the area of the rectangle. Length and breadth of rectangle are entered through keyboard.

8.

Print the average of three numbers entered by user by creating a class named 'Average' having a method to calculate and print the average.

9.

Print the sum, difference and product of two complex numbers by creating a class named 'Complex' with separate methods for each operation whose real and imaginary parts are entered by user.

10.

Write a program that would print the information (name, year of joining, salary, address) of three employees by creating a class named 'Employee'. The output should be as follows:

Name	Year of joining	Address
Robert	1994	64C- WallsStreat
Sam	2000	68D- WallsStreat
John	1999	26B- WallsStreat

11.

Add two distances in inch-feet by creating a class named 'AddDistance'.

===== Level 2 =====

1.

Write a program by creating an 'Employee' class having the following methods and print the final salary.

- 1 - 'getInfo()' which takes the salary, number of hours of work per day of employee as parameter
- 2 - 'AddSal()' which adds \$10 to salary of the employee if it is less than \$500.
- 3 - 'AddWork()' which adds \$5 to salary of employee if the number of hours of work per day is more than 6 hours.

2.

Create a class called 'Matrix' containing constructor that initializes the number of rows and number of columns of a new Matrix object. The Matrix class has the following information:

- 1 - number of rows of matrix
- 2 - number of columns of matrix
- 3 - elements of matrix in the form of 2D array

3.

The Matrix class has methods for each of the following:

- 1 - get the number of rows
- 2 - get the number of columns
- 3 - set the elements of the matrix at given position (i,j)
- 4 - adding two matrices. If the matrices are not addable, "Matrices cannot be added" will be displayed.
- 5 - multiplying the two matrices