

SSN College of Engineering
Department of Computer Science and Engineering
CS8383 – Object Oriented Programming Laboratory
II Year CSE - C Section (III Semester)
Academic Year 2018-19

Exercise 1 a: Basic Java Programs

1. Write a java program to check whether the given number is odd or even.
2. Write a java program to find the factorial of the given number.
3. Write a java program to find the sum of first 'n' natural numbers.
4. Write a java program to find whether the given number is Armstrong number or not.
5. Write a java program to create a class named 'Student' with name, id, dept, 3 marks as data members. Write function to assign the inputs, calculate grade, display and search.
6. Find the GCD of two numbers by developing a Java program.
7. Develop a Calculator program using switch-case by getting the input through the command line arguments.

Exercise 1 b: Java Programs- Classes and Arrays

1. Write a java program to get 'n' elements in an array. Perform the linear and binary search.
2. Write a java program to find matrix addition, subtraction and multiplication.
3. Develop a Java application to generate Electricity bill. Create a class with the following members: Consumer no., consumer name, previous month reading, current month reading, type of EB connection (i.e domestic or commercial). Compute the bill amount using the following tariff.

If the type of the EB connection is domestic, calculate the amount to be paid as follows:

- First 100 units - Rs. 1 per unit
- 101-200 units - Rs. 2.50 per unit
- 201 -500 units - Rs. 4 per unit
- 501 units - Rs. 6 per unit

If the type of the EB connection is commercial, calculate the amount to be paid as follows:

- First 100 units - Rs. 2 per unit
- 101-200 units - Rs. 4.50 per unit
- 201 -500 units - Rs. 6 per unit
- 501 units - Rs. 7 per unit

4. Write a java program to create a class named 'Student' with name, id, dept, 3 marks as data members. Write function to assign the inputs, calculate grade, display and search. Perform these operations for 'n' number of students. [Search using id and dept – use method overloading]