# Day wise hands on assignments/case studies:

1. Create a simple Java program that prompts the user to enter a real number, and then prints the following information, with appropriate descriptive text:
   1. The area and circumference of the circle with that radius.
   2. The area, perimeter, and length of diagonal of the square that has sides of that length. (Use the Pythagorean theorem to calculate the length of the diagonal.)
   3. The volume and surface area of the sphere with that radius.
2. Accept a 6 digit integer and check whether its palindrome or not.
3. Write a program which factorizes the integer number.

Program ask for the input if you enter the integer number 100 then the output of the program is (2^2)\*(5^2).Where "^" stands for exponential and "\*" stands for multiplication.

1. Write a Java Program to input an array of integers and then print the following
   1. Average value of Array elements
   2. Minimum and Maximum value in an array
2. Write a program to create a Matrix (a two dimensional array of size 10 by 10). Write a code to perform below operations:
   1. Set each of the array element to zero.
   2. Write code to accept an integer values (val, r, c) and set the array element at row r and column c to the value val.
   3. Find transpose of the matrix