## **ACM SIGPLAN TASKS**

- Creation of java- Installing JDK from oracle website and setting up of JRE to execute java programs.
- A simple HELLO WORLD program- To understand the flow of execution through a simple program.
- String formatting and String concatenation- To perform algebraic operations and read about various datatypes in java.
- Program to check whether the input number is palindrome or not.
- Program to generate the given patterns as output.
- Program to find the sum of digits until the sum is in single digit.
- To understand the concepts of 1D/2D arrays, enhanced loop and jagged array.
- Check whether the inputted array is orthogonal or not.
- Program to print the sum of that hourglass having maximum sum in a 2-D array.
- To understand the concepts of classes, objects, constructor and constructor overloading and this keyword solve the given problem statements.
- To learn about the importance of packages and implement the same through given problem statements.
- Program to count the number of objects of a class in java.
- Implementation of encapsulation through getter and setter functions.
- Solve the given problem statement based on the concept of inheritance.
- Read about interfaces and abstract keyword and solve the given problem statement.
- To understand various string methods and write a program to implement the same on the given string.
- Learn concepts of Exception handling (try-catch, throw, throws).
- Write a program to implement user-defined exceptions.
- Write a program to implement multithreading in either one of the ways-
  - 1.Extending the thread class.
  - 2.Implementing the runnable interface.
- Learning concepts of AWT hierarchy, Applets and Frames.
- Write a program to implement applet life cycle.
- Write a program to generate a calculator through applet and through frames.
- To understand various graphics methods and generate the given figure as output.
- Learning concepts of Swings and write a program to generate a signup form in swings.
- To learn about Collections in java.
- Solve the given problem statement of java arraylist class.
- Solve problem statement of java linkedlist class.
- Learning about hashmap, hashset and treemap class.
- Program to implement various synchronisation problems.
- Program to build a clock.
- PROJECT- Gaming project