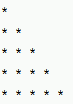
Assignment-1

1. List and Explain basic features of any object oriented programming.
2. Draw and explain the terms present in object oriented paradigm.
3. Draw and explain java environment. (API, JDK, JSL, JRE, JVM). What is the requirement of compiling java program? What is the minimum requirement for running java program? Also, draw diagram showing that java is two stage language.
4. List and explain (with an example) features or characteristics of JAVA programming language.
5. Draw JAVA program structure.
6. Difference between C, C++ and JAVA

Assignment 2.

1. Java Program to demonstrate the use of If else-if ladder.
   * program of grading system for fail (<50),
   * D grade -marks>=50 && marks<60
   * C grade- marks>=60 && marks<70,
   * B grade- marks>=70 && marks<80 ,
   * A grade- marks>=80 && marks<90
   * and A+ - marks>=90 && marks<100.
2. Program to check POSITIVE, NEGATIVE or ZERO:
3. Java Program to demonstrate the example of Switch statement  where print month name for the given number
4. Write a java program for Pyramid Example



Assignment-3

1. Mention the reasons for following term required for (Q1) program- public, static, void, main, String[], class-name
2. Why in java public class name and filename are same. Also mention the reason for “why there should be only one public class in single java file”.
3. a. Write a program to print the names of students by creating a Student class. If no name is passed while creating an object of Student class, then the name should be "Unknown", otherwise the name should be equal to the String value passed while creating object of Student class.

* b. Create a class named 'Programming'. While creating an object of the class, if nothing is passed to it, then the message "I love programming languages" should be printed. If some String is passed to it, then in place of "programming languages" the name of that String variable should be printed.  
  For example, while creating object if we pass "Java", then "I love Java" should be printed.

1. Suppose you have a Piggie Bank with an initial amount of $50 and you have to add some more amount to it. Create a class 'AddAmount' with a data member named 'amount' with an initial value of $50. Now make two constructors of this class as follows:

1 - without any parameter - no amount will be added to the Piggie Bank2 - having a parameter which is the amount that will be added to Piggie BankCreate object of the 'AddAmount' class and display the final amount in Piggie Bank.

1. Design and write a class to represent a bank account that includes the following members:

a. Data members

* + Owner name
  + Account number
  + Balance amount in the account

b. Methods members

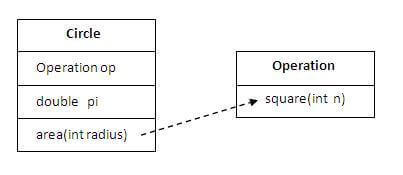
* + To assign initial values
  + To deposit an amount
  + To withdraw an amount after checking balance
  + To display the owner name and balance

1. Write java a program where we will access static variable from both instance and static method. Take a as instance variable and b as static variable. Implement two methods m1 as non static and m2 static that shows the values of a and b. Verify whether we can access non static variable in static method.
2. Display Hello world on console without creating any object and writing any code in main method.

Count number objects created from class using static variable.

Also show the execution priority for Static block, static main method

1. Write a class Student in which use static variable college. This variable is common to all students. The student information will be displayed with different roll no and names but same college.
2. Write a java program that will demonstrate the use of this keyword for calling constructors, methods and reusing constructor of a current class.
3. Create a class named 'Rectangle' with two data members 'length' and 'breadth' and two methods to print the area and perimeter of the rectangle respectively. Its constructor having parameters for length and breadth is used to initialize length and breadth of the rectangle. Let class 'Square' inherit the 'Rectangle' class with its constructor having a parameter for its side (suppose s) calling the constructor of its parent class as 'super(s,s)'. Print the area and perimeter of a rectangle and a square.
4. Now repeat the Q11 example to print the area of 10 squares .Hint-Use array of objects
5. Implement following diagram. Explain aggregation.



1. Implement This diagram. Create reference variable of subclasses and assign their objects and check the results.

