## Write Java Programs to

# Day2

- 1) add, subtract, multiply and divide integer and float values
- 2) Declare variables of all data types and print values.
- 3) print the sum of two numbers.
- 4) print the area and perimeter of a circle

## Day3

- 5) compare two numbers.
- 6) Greatest of 4 numbers.
- 7) Print weekday using switch statement for a given integer 1 to 7.
- 8) Check whether a given number is prime or not
- 9) Check whether a given number is palindrome or not.
- 10)that takes three numbers as input to calculate and print the average of the numbers.
- 11) check whether Java is installed on your computer.

# Day4

- 12) reverse a string.
- 13) count the letters, spaces, numbers and other characters of an input string.
- 14) that takes a number as input and prints its multiplication table upto 10.
- 15)get a number from the user and print whether it is positive or negative.
- 16) solve quadratic equations
- 17) Take three numbers from the user and print the greatest number.
- 18) print 'welcome' 100 times.
- 19) display the n terms of odd natural number and their sum.
- 20) Fibonacci series using recursion
- 21) Finding whether a given year is leap or not.

## Day5

- 22) find the index of an array element.
- 23) calculate the average value of array elements.
- 24) test if an array contains a specific value.
- 25) search an element in an array
- 26) find the size of a specified file.
- 27) display the system time.

#### Day6

- 28) replace a specified character with another character.
- 29) get a number from the user and print whether it is positive or negative
- 30) find the number of days in a month using switch statement

#### Day7

### Class programs

- 1) Declare a student class, Get user input for the class instance variables and pass it to constructor of the class and print the values.
- 2) Declare an employee class with minimum 4 fields, declare respective constructors, methods and use it.

#### Day8 & 9

3)Print default values of primitive data type variables using static as well as instance variables.

#### Day 10

- 4) Declare a customer class with cid and cname, inherit a class called retailcustomer with creditcardnumber Inherit another class wholesalecustomer from customer class with accno.declare constructor in subclasses and initialise the values. display the values using display method Create objects and invoke the respective methods
- 5) Implement inheritance and polymorphism with Employee and Manager classes

### Day11

- 6)Implement runtime polymorphism using Account, Savings Account, Current Account and Demat Account classes with respective instance variables, methods and constructors.
- 6 a) declare abstract class customer with abstract methods getinput(), display() and order() methods, inherit retailcustomer class as well wholesalecustomer class from customer and override the abstract methods, in subclasses define the suitable data members.
- 6 b) create abstract class Course with course duration and eligibility as variables, create abstract methods for printing eligibility based on the courses. overide this abstract method in ArtsCourses and EngnCourses classes

#### Day12

7) Implement interface concept for the shape program done earlier.

#### Day 13

8) Write a program with an interface account with default methods & static variables.

### Day 14

9) Write a program to convert a given string value to an integer.

### **Day 15**

10) Create a two packages pkg1, pkg2 with 2 classes and 2 subclasses in each package, Import two packages and use the classes in main program. (Use Student details for the implementation)

### Day16

11)Implement exception handling in Account class program.

### Day17

12)Write a program for getting integer and string input and write those values into a text file. 12a) Using StringTokenizer split up an input file based on comma and write the output into console.

#### **Day 18**

- 13) Read and write from a Random access file .
- 14) Write a program to create an arraylist of String objects, iterated thru the list to find out whether a specific element is present or not.

### **DAy 19**

15) Implement a generic class with two generic type variables.

#### Day 20

16) Create multiple threads using Thread class and Runnable interfaces. Assign same task and different task to multiple threads.

# Day 21

- 17) Invoke private methods of some other class using reflection.
- 18) Create multiple threads using anonymous inner classes.

#### Day 22

- 19) create an interface student with abstract method as marks with one argument total, in main create lambda to calculate average (5 subs) and print it.
- 20) Apply and practise lamda expression for a linked list traversal.

#### Additional

- 1)Demonstrate a two-dimensional array.
- 2)Write a program to create a room class, the attributes of this class is roomno, roomtype, roomarea and ACmachine. In this class the member functions are setdata and displaydata.

3)

Write a program to create interface named test. In this interface the member function is square. Implement this interface in arithmetic class. Create one new class called ToTestInt in this class use the object of arithmetic class.

4)Create an outer class with a function display, again create another class inside the outer class named inner with a function called display and call the two functions in the main class.

Write a program to create a package named pl, and implement this package in ex1 class.

5)

Write a program to create a package named pl, and implement this package in ex1 class.

6)Write a program to accept specified number of characters as input and converts them into uppercase characters.

Complete these pgms soon to test you java skills learnt so far, inform me once u completed