1. Create a class Employee to print “Welcome to java Technology”.
2. Create a class Employee which contains the variables eno, ename, esal,mobile number (useeither String or long datatype). Print the stored values.
3. Create a class Student with the following variables and methods Fields:
   Sno:int Sname:String Java_marks:int Daa_marks:int Python_marks:int Total:int Average:float Member functions: public void setDetails() Use this method to set the values tothe variables Public void getDetails() Print all the values stored in the variables
4. Create a class Student with the following variables and methods Fields:
   Sno:int Sname:String Java_marks:int Daa_marks:int Python_marks:int Total:int Average:float Member functions: public void setDetails() Use this method to set the values tothe variables Public void getDetails() Print all the values stored in the variables
   Use Scanner() concept to modify the above program to read data from the user. Modify thesetDetails() method to read data from the user.
5. Write a Java class InformationExtraction which contains the following information Fileds: Name, Gender(use char datatype), Age, Mobile number, CGPA .
   Create methods storeInformation() and displayInformation() to set and display the fileds
   a. Store values directly into the variables
   b. Store values using Scanner class
6. Create a class Library with the fileds book_number, bookname, authorname, price, no_of_pages. Create the methods
   a. Using a default method and another method to display the information
   b. Use a parameterized method to set the values and another method to display the information
7. Create a class Library with the fileds book_number, bookname, authorname, price, no_of_pages. Create the methods
   b. Using a default method and another method to display the information
   b. Use a parameterized method to set the values and another method to display the information
   Modify the program above by changing the behaviour of the methods by accepting the data from the user
   a. Use java.util.Scanner class to read data from the user
8. Create a class Average with the fields a and b. Set the values using default constructor andprint the information using a method
9. Create a class Library with the fileds book_number, bookname, authorname, price, no_of_pages. Create the methods

c. Using a default method and another method to display the information

b. Use a parameterized method to set the values and another method to display the information

Modify program above by setting the values through the parameterized constructors and the printthe information

10. Create a class Computer with the fields processor, memory, system type, name of the computer, status of windows activation. Set the values to these fields using method overloading and display the information.
11. Create a class Computer with the fields processor, memory, system type, name of the computer, status of windows activation. Set the values to these fields using Constructor overloading and display the information
12. Create a class cuboid with the variables length, breadth and height. Set the values to these variables using default and parametersied constructors. Compute the volume of the cuboid and display the information.
13. Create a class cuboid with the variables length, breadth and height. Set the values to these variables using method overloading. Compute the volume of the cuboid and display the information.
14. Create a class Rectangle with fields length and breadth. Set the values to these two variables using method overloading and write a method to compute the area and perimeter using a method.
15. Create a class Rectangle with fields length and breadth. Set the values to these two variables using Constructor overloading and write a method to compute the area and perimeter using a method.
16. Create a class Emp with the fields eno,ename,company_name. Take the company_name as a static variable. Write a method set() to set the values and print the information using display()method
17. Create a class Emp with the fields eno,ename,company_name. Take the company_name as a static variable. Write a method set() to set the values and print the information using display()method. Modify company_name using a static method.
18. Create a class Reservation with the fields of username, email, no of tickets. Create a method to set the values to the username and email. Write a method to ask the user to enter the number of tickets and reduce that no of tickets. Print the total information
19. Create a class Reservation with the fields of username, email, no of tickets. Create a method to set the values to the username and email. Write a static method to ask the user

to enter the number of tickets and reduce that no of tickets. Print the total information

20. Create a class A with the variables x,y. Create a method to set the date to x and y. Create a subclass B with the variable z. create a method to set the data to z. Write a method to display the information.

21. Create a class Q with a variable q and consider default constructor for setting to q. Create a subclass R with a variable r and consider default constructor for setting to r. Create a subclassto R as S with a variable s and consider a default constructor for setting for s. Create a displayfunction in each of the classes. Create a main method to call the functions

22. Create a class person with the filed firstname, lastname. Use parameterized method to set the values to the variables at runtime. Create sub class Employee with the variable eno, edept, esal. Create parameterized method for setting the data and default method for display the information.

23. Create a class person with the filed firstname, lastname. Use parameterized method to set the values to the variables at runtime. Create sub class Employee with the variable eno, edept, esal. Create parameterized method for setting the data and default method for display the information.

    Modify the above program by creating a subclass of Employee called Department with the variables dno, dname, experience. Set parameterized method for setting the data and display all the information

24. Create a class named Employee with the following

    detailsData members:

    (a) name (b) address (c) age (d) gender

    Methods :

    (a) Display () to show the employee details

    Create another class FullTimeEmployee that inherits the Employee class :

    Data members :

    (a) Salary Designation

    Method :

    (a) Display () to show the salary and designation along with other employee details.

Create another class PartTimeEmployee that inherits the Employee class :

Data members :

(a) Workinghours rateperhour

Methods :

(a) caluculatepay() to caluculate the amount payable

(b) display() to show the amount payable along with the employee details.

Create objects of these classes and call their methods .use appropriate constructors.

25. Create a class Employer with company_name and city. Create a parameterised method companyDetails(String, String) to set the values to the two variables. Create a showCompanyDetails() method to display the company information.

Create a subclass Employee with eno,ename,esal. Create a parameterized constructor to set the values to these variables. create a showEmployee() to display the information.

Create a main method to test the classes

26. Create a base class called person

with SSN and name as data types with getdata and display as member functions. Derive a new class called student with rollno, branch,mark1,mark2,mark3 as datamembers and getdataand display as member functions and finally derive a new class called grade from student class in that calculate the average for marks and display the grade for the student

a. A grade >=90%

b. B grade>=80%

c. C grade>=70%

d. Less than 70% fail.

27. .Create a class Person with the fileds first name and last name. Set the data and print it.Create two subclasses employee and staff with the variables and methods:

Employee:

Variables: eno, esal, designation

Methods: setEmployee(int, double, String) and displayEmployee()

Staff:

Variable: sno,experience

Methods:setStaff(int,int) and displayStaff()

Create a class to access the information of all

28. Create a class Polygon with variables l,b,h. Create a method set() to read the data. Create an abstract method compute(). Create a sublcass rectangle to find the area of the rectangle. Create another subclass cuboid to compute the volume of the cuboid. Test the class bycreating a main method.
29. Create a class SortAlgorithm with an array and three methods. One method will read integer data to store into the array. create abstract method sort(int[[]) to implement sorting algorithm.Create a display method to display the array. Create a subclass to implement sorting algorithm. Test the created class
30. Implement a java program for multilevel inheritance.
31. Write the following code in your editor below:
    1. A class named Arithmetic with a method named add that takes 2 integers as parametersand returns an integer denoting their sum.
    2. A class named Adder that inherits from a superclass named Arithmetic.
32. Complete the code in your editor by writing an overridden *getNumberOfTeamMembers* method that prints the same statement as the superclass' *getNumberOfTeamMembers* method, except that it replaces n with 11 (the number of players on a Soccer team).
33. When a method in a subclass overrides a method in superclass, it is still possible to call the overridden method using **super** keyword. If you write *super.func()* to call the function *func()*, it will call the method that was defined in the superclass.

    You are given a partially completed code in the editor. Modify the code so that the codeprints the following text:

    Hello I am a motorcycle, I am a cycle with an
    engine.My ancestor is a cycle who is a vehicle
    with pedals.
34. Write a program to raise Arithmetic Exception.
35. Write a program to raise Null Pointer Exception
36. Write a program to raise ArrayIndexOutOfBoundsException to access an element in the arraywhich is not there in it.
37. Create a class with two numbers and an array. Ask the user to enter the numbers through the Scanner class. Raise the exceptions like ArithmeticException,

ArrayIndexOutOfBoundsException and InputMismatchException

38. Write a program to ask the user to enter the marks in java and maximum marks. If the maxmarks entered by the user is 0, then raise the exception.
39. Write a program to ask the user to enter the percentage of marks in III semester. If the percentage entered is lessthan 50, raise an IneligibleException to inform them that he is not eligible for placements. Otherwise Print his percentage.
40. For this problem, we have 2 types of queries you can perform on a List:

1. Insert y at index x:

Insert

x y

2. Delete the element at index x:

Delete

x

Given a list,L, of N integers, perform Q queries on the list. Once all queries are completed,print the modified list as a single line of space-separated integers.

41. Sometimes it's better to use dynamic size arrays. Java's Arraylist can provide you this feature. Try to solve this problem using Arraylist.

    You are given n lines. In each line there are zero or more integers. You need to answer a fewqueries where you need to tell the number located in yth position of xth line.

    Take your input from System.in.
42. In the first line, there will be an integer denoting number of pairs. Each of the next lines willcontain two strings seperated by a single space. Print T lines. In the ith line, print number of unique pairs you have after taking ith pair as input.
43. Create multiple threads which prints VRSEC and CSE for 15 times and 30 times.
44. Create a thread that display area of square and another thread to display volume of cuboid 10times for every 2 and 3 seconds respectively.
45. Create multiple threads for the following cases:
    - Create four threads that prints even numbers, odd numbers, prime numbers,natural numbers upto that number
    - Assign priorities to the program
46. Create three threads which display Java, technology, third year and of them set priorities to the first and third thread as 8 and third thread 1. Make use of the yield method to invoke the equal priority thread when the other thread is executing.

47. Create three threads which display Welcome, to, programming and of them set priorities tothe first and third thread as 6 and third thread 2. Make use of the yield method to invoke the equal priority thread when the other thread is executing.
48. A java program to check whether the given year is leap year or not using block lambda expressions.
49. A java program to sum all the Fibonacci values upto the given integer using streams.