**Classes, Object Packages (7/2/19-14/2/19)**

1. Write a program to check whether a given number is prime or not
2. Write a program to accept range from command line argument & print the perfect numbers from the given range.
3. Write a program to multiply 2 matrices
4. Write a program to calculate and print the first n Fibonacci numbers.
5. Write a program to accept employee information such as Emp\_id, Name, Designation and Salary using parameterized constructor and display the same.
6. Define a class MyNumber having one private int data member. Write a default constructor to initialize it to 0 and another constructor to initialize it to a value (Use this keyword). Write methods isNegative, isPositive, isZero, isOdd, isEven. Create an object in main
7. Create a class Account with members account no., acc type, cust name, balance & methods deposit, withdraw &showbalance, accept all the details & display all details.
8. Write a program to find the max and min from given numbers where an array is having 5 elements
9. Write a Java program can contain two classes: Computer(model no, company, processor) and Laptop(model no, company, type, ). Both classes have their own constructors and a methods (display()). In main method create object of two classes and call their methods.
10. Define a Student class (roll number, name, percentage). Define a default and parameterized constructor. Keep a count of objects created. Create objects using parameterized constructor and display the object count after each object is created. (Use static member and method). Also display the contents of each object.
11. Modify the above program to create n objects of the Student class. Accept details from the user for each object. Define a static method “sortStudent” which sorts the array on the basis of percentage.
12. Create a package named Series having three different classes to print series:
    1. Prime numbers b. Fibonacci series c. Squares of numbers

Write a program to generate ‘n’ terms of the above series.

1. Write a Java program to create a Package “SY” which has a class SYMarks (members –

ComputerTotal, MathsTotal, and ElectronicsTotal). Create another package TY which has a class TYMarks (members – Theory, Practicals). Create n objects of Student class (having rollNumber, name, SYMarks and TYMarks). Add the marks of SY and TY computer subjects and calculate the Grade (‘A’ for >= 70, ‘B’ for >= 60 ‘C’ for >= 50 , Pass Class for > =40 else ‘FAIL’) and display the result of the student in proper format.

1. Write a Java program to create a package Package1 which contains class Book having details Book Name, Price and Author name and import the created package using import package where we can create the objects of class in this package and display details of those objects.