ASSIGNMENT 1

1. Program to print prime no 1-100, e.g. 2,3,5,7.
2. Program to print factorial of a no.
3. 1

   1 2

   1 2 3

4.

```
    *
   * *
  * * *
 * * * *
```

5.

```
      *
    * * *
  * * * * *
* * * * * * *
```

ASSIGNMENT 2

1. Program to enter a password and check length not <8 and >15.
2. Program to check password and repassword are same or not.

ASSIGNMENT 3

1. Program to check occurance of character in a sentence
   using lastIndexOf() method.

2. Program to check word is Palindrome or not.

madam, nitin

ASSIGNMENT 4

Q.1 Assignment: Create a class Student with following members:

1) Instance variable : String name, result; double eng, math, science, tmarks, per;

2) Constructor : Student(String, double, double, double)

3) methods : void setData(String, double, double, double)

void calcResult(), void showResult()

Note: result should be like : First Div., Second Div, Third Div., or Fail. Assume marks of each subject out of 100. If marks in any subject less than 40 then the result should be fail.

ASSIGNMENT 5

Q.1. Difference between Method Overloading & Method Overriding

Q.2. Assignment: - Create a class Employee :

Instance variables: empno, ename, basic, netsalary

Constructors: use necessary constructors to initialize.

Method: calcSalary() to calculate netsalary.

- Next create a class Manager inheriting Employee class:

Instance variables: hra, da, ta assume da = 50% of basic.

hra, ta <- pass from command prompt.

Method: override method calcSalary() to calculate netsalary for Manager class.

Q.3. Assignment: on applying Method Overriding

```
class Figure {
    double dim1, dim2;
    Figure(double d1, double d2){
        dim1=d1;
        dim2=d2;
```

```
    }
    double area(){
            return 0;
    }
}
```

class: Rectangle, Triangle by extending Figure class.

ASSIGNMENT 6

Q.1. Assignment: Modify class Figure as an abstract class by adding abstract method area().

Q.2. Create interface vehicle and implements splendor from vehicle.

Create another interface VehicleNew and implements Pulsor from VehicleNew.

ASSIGNMENT 7

Assignment: 1. Create your own exception class BankException with message Insufficient funds.

2. Create a Bank class : with instance variable balance. Using constructor initialize with some

amount say 50000.

3. Define methods : void withdraw(double) , withdraw method should update balance. if balance is

sufficient then display message: Collect your cash else: throw new BankException(double, double)

4. Create BankDemo class with main() to test your application.

ASSIGNMENT 8

Q.1. Create a class ChildThread extending class Thread or implementing Runnable interface. Use necessary constructors to initialize. From its run if thread name is odd then print odd numbers or if thread name is even then print even numbers. Create a class RunnableDemo/ThreadDemo with public static void main. Inside main create two threads. Odd and Even should be passed as thread names to the ChildThread.

Q.2. Assignment:

- Create a class Bank with instance variables: balance. Use necessary constructor to initialize balance. Define a synchronized method : withdraw(int amt) { ….. }
- The withdraw method should check if balance is sufficient. If sufficient then display message "Your Transaction is under process" and call sleep method for 2 seconds.
- Next update balance (i.e. balance=balance-withdraw-amt)
- Next display message "Your Transaction is completed : Avail balance is :"
- Call sleep for 1 second and then display Thank You message!
- Next create a BankThread class. From its run() call the Bank withdraw().
- Next create BankDemo with public static void main().
- Inside main create Bank Object. Next Try to perform 4 types of transactions: Cash, Cheque, DD, and ATM
- (Cash, Cheque, DD, ATM should be the names passed as thread names to the BankThread class.

ASSIGNMENT 9

1. Create a class ByteDemo and takes a console input through keyboard using System.in.read().
2. Create a class BufferedReaderDemo and takes a keyboard input through keyboard using BufferedReader.

ASSIGNMENT 10

1. Create a class DataInputStreamDemo and takes a keyboard input through keyboard using DataInputStream.

ASSIGNMENT 11

1. Create a class SequenceInputStreamDemo. Take four files as input using FileInputStream and pass it in vector of FileInputStream. Using Enumeration read elements from vector and passed it to SequenceInputStream and print it.

ASSIGNMENT 12

1. Design an applet for an alternate moving banner.

ASSIGNMENT 13

Q.1. Depending upon how many times mouse button clicked, change background color. Upto 4 times using a switch. Find out which button was clicked. (i.e. Left, Right or Middle). Make use of get Modifier. switch(count){ case 1: // break; case 2: // …… }

ASSIGNMENT 14

1. Design a Smiley face with blinking eyes.

ASSIGNMENT 15

1. Design an applet for calculator use of panel.

Q.2. Make use of 3 cards using card Layout as shown in fig.