71.Program to print Fibonacci series upto a number using BufferedReader :

Code:

```
import java.io.BufferedReader;
import java.io.IOException;
import java.io.InputStreamReader;

public class FibonacciSeriesDemo
{
   public static void main(String[] args) throws IOException
   {

      //Get the number of elements to be generated in Fibonacci series
      BufferedReader br = new BufferedReader(new
InputStreamReader(System.in));
      System.out.println("Enter the decimal number");
      String limitString = br.readLine();
      int n = Integer.parseInt(limitString);
      int a=0,b=1,c;
      System.out.print(a+" ");
      System.out.print(b+" ");
      for(int i=1;i<=n-2;i++)
                  {
                        c=a+b;
                        System.out.print(c+" ");
                        a=b;
                        b=c;
                  }
       }
}
```

Output:

```
root@sree-Inspiron-5558:~/Desktop# javac FibonacciSeriesDemo.java
root@sree-Inspiron-5558:~/Desktop# java FibonacciSeriesDemo
Enter the decimal number
10
0 1 1 2 3 5 8 13 21 34 root@sree-Inspiron-5558:~/Desktop#
```

72. How to read and write excel file in java:

```
try {
    POIFSFileSystem fs = new POIFSFileSystem(new FileInputStream(file));
    HSSFWorkbook wb = new HSSFWorkbook(fs);
    HSSFSheet sheet = wb.getSheetAt(0);
    HSSFRow row;
    HSSFCell cell;

    int rows; // No of rows
    rows = sheet.getPhysicalNumberOfRows();

    int cols = 0; // No of columns
    int tmp = 0;

    // This trick ensures that we get the data properly even if it doesn't start from
first few rows
    for(int i = 0; i < 10 || i < rows; i++) {
        row = sheet.getRow(i);
        if(row != null) {
            tmp = sheet.getRow(i).getPhysicalNumberOfCells();
            if(tmp > cols) cols = tmp;
        }
```

```
    }

    for(int r = 0; r < rows; r++) {
        row = sheet.getRow(r);
        if(row != null) {
            for(int c = 0; c < cols; c++) {
                cell = row.getCell((short)c);
                if(cell != null) {
                    // Your code here
                }
            }
        }
    }
} catch(Exception ioe) {
    ioe.printStackTrace();
}
```

73.To check Prime numbers:

Code:

```
import java.util.Scanner;
class PrimeCheck
{
  public static void main(String args[])
  {
        int temp;
        boolean isPrime=true;
        Scanner scan= new Scanner(System.in);
        System.out.println("Enter a number for check:");
        //capture the input in an integer
        int num=scan.nextInt();
        for(int i=2;i<=num/2;i++)
        {
         temp=num%i;
          if(temp==0)
          {
            isPrime=false;
            break;
          }
        }
        //If isPrime is true then the number is prime else not
        if(isPrime)
          System.out.println(num + " is Prime Number");
        else
          System.out.println(num + " is not Prime Number");
  }
}
```

Output:

```
0 1 1 2 3 5 8 13 21 34 root@sree-Inspiron-5558:~/Desktop# javac PrimeCheck.java
root@sree-Inspiron-5558:~/Desktop# java PrimeCheck
Enter a number for check:
37
37 is Prime Number
root@sree-Inspiron-5558:~/Desktop#
```

74. To check for palindrome words in a sentence:

```
import java.util.*;
class Prog74
{
public static void main(String [] args)
{
Scanner in = new Scanner(System.in);
System.out.print("Enter the String : ");
String st = in.nextLine();
int l = st.length();
String bin = "";
for(int i=0;i<l;i++)
{
char ch = st.charAt(i);
if(!(Character.isWhitespace(ch)))
{
bin=bin+ch;
continue;
}
else
if(Character.isWhitespace(ch))
{
int b = bin.length();
int d=bin.charAt(0);
int e = bin.charAt(b-1);
if(d==e)
System.out.print(bin+" ");
bin = "";
}
}}}
```

75.To check Armstrong number or not:

Code:

```
import java.io.BufferedReader;
import java.io.IOException;
import java.io.InputStreamReader;
 class ArmstrongExample{
  public static void main(String[] args)  throws IOException{
    int c=0,a,temp;
   BufferedReader br = new BufferedReader(new InputStreamReader(System.in));
        System.out.println("Enter the number");
        String l = br.readLine();
        int n = Integer.parseInt(l);
    temp=n;
    while(n>0)
    {
    a=n%10;
    n=n/10;
    c=c+(a*a*a);
    }
    if(temp==c)
    System.out.println("armstrong number");
    else
        System.out.println("Not armstrong number");
   }
}
```

Output:

```
root@sree-Inspiron-5558:~/Desktop# javac ArmstrongExample.java
root@sree-Inspiron-5558:~/Desktop# java ArmstrongExample
Enter the number
153
armstrong number
root@sree-Inspiron-5558:~/Desktop#
```

76.Decimal to binary:

```
public class ConvertIntToBinaryExample {


	public static void main(String[] args) {


		int i = 56;


		String strBinaryNumber = Integer.toBinaryString(i);


		System.out.println("Convert decimal number to binary number
example");
		System.out.println("Binary value of " + i + " is " + strBinaryNumber);


	}
}
```

77.Binary to Decimal:

```
public class ConvertBinaryToDecimalNumber {

	public static void main(String[] args) {

		//declare string containing binary number
		String strBinaryNumber = "111000";

		 int decimalNumber = Integer.parseInt(strBinaryNumber,2);
		 System.out.println("Binary number converted to decimal number");
		 System.out.println("Decimal number is : " + decimalNumber);

	}
}
```

78. Check if string contains valid number:

```
public class CheckValidNumberExample {

	public static void main(String[] args) {

		String[] str = new String[]{"10.20", "123456", "12.invalid"};

		for(int i=0 ; i < str.length ; i ++)
		{

			if( str[i].indexOf(".") > 0 )
			{

				try
				{

					Double.parseDouble(str[i]);
					System.out.println(str[i] + " is a valid decimal
number");
				}
				catch(NumberFormatException nme)
				{
					System.out.println(str[i] + " is not a valid decimal
number");
				}

			}
			else
			{
				try
				{
```

```
                    Integer.parseInt(str[i]);
                    System.out.println(str[i] + " is valid integer number");
                }
                catch(NumberFormatException nme)
                {
                    System.out.println(str[i] + " is not a valid integer
number");
                }
            }
        }

    }
}
```

79.To print pyramid pattern:

```
class pyramid
{
	public static void main(String[] args) {


for (int i=0;i<=5;i++) {

for (int j=0;j<i;j++) {
System.out.print("* ");
}
System.out.println();

}

}

}
```

```
root@sree-Inspiron-5558:~/Desktop# javac pyramid.java
root@sree-Inspiron-5558:~/Desktop# java pyramid

*
* *
* * *
* * * *
* * * * *
root@sree-Inspiron-5558:~/Desktop#
```

80.To print the sum of the series: -1+2-3+4-5+6……17:

```
class series
{
public static void main(String [] args)
{
Int s=0;
for(int i=1;i<18;i++)
{ if(i%2!=0)
s=s-i;
else
s=s+i;
}
System.out.println(“Sum of series is: “ + s);
}
}
```

```
root@sree-Inspiron-5558:~/Desktop# javac series.java
root@sree-Inspiron-5558:~/Desktop# java series
Sum of series is: -9
root@sree-Inspiron-5558:~/Desktop#
```