1.FIBONOCCI SERIES

```
package task1;
import java.util.Scanner;
abstract class Series{
	abstract void series();
}

class Fib extends Series{
	public void series() {
		Scanner s = new Scanner(System.in);
		System.out.print("Enter a number:");
		int n=s.nextInt();
		int firstN = 0, secondN=1;
		for(int i=1;i<=n;i++) {
			System.out.println(secondN);

			int nextN=firstN+secondN;
			firstN=secondN;
			secondN=nextN;
		}

	}
}
public class Fibonaccis {

	public static void main(String[] args) {
		Fib f = new Fib();
		f.series();

	}
```

OUTPUT:

```
Enter a number:7
1
1
2
```

3
5
8
13

2.ARMSTRANG NUMBER

```
package task1;
import java.util.Scanner;
abstract class Arm{
	abstract public void armstrong();
}

class Armstrongs extends Arm{
	public void armstrong(){
		Scanner s = new Scanner(System.in);
		System.out.println("Enter a number:");
		int number = s.nextInt();
		System.out.println("Enter number  count:");
		int count = s.nextInt();
		int original =number;
		int remainder , result=0;



		while(original !=0) {

			remainder = original%10;
			result+=Math.pow(remainder,count);
			original/=10;
		}
		if(result==number) {
			System.out.println("It is an Armstrong Number.");
		}
		else {
```

```
                    System.out.println("It is not an Armstrong
Number.");
                }


        }
}
public class Armstrong {

        public static void main(String[] args) {
                Armstrongs s = new Armstrongs ();
                s.armstrong();

        }

}
```
OUTPUT:

```
Enter a number:
0
Enter number  count:
1
It is an Armstrong Number.


Enter a number:
153
Enter number  count:
3
It is an Armstrong Number.
```

3.PRIME NUMBER

```
package task1;
import java.util.Scanner;
```

```
public class Primes {

	public static void main(String[] args) {
		Scanner s = new Scanner (System.in);
		System.out.println("Enter a number:");
		int num = s.nextInt();
		boolean check = false;
		for(int i=2;i<=num/2;++i){
			if(num%i==0) {//not prime
				check=true;
				break;
			}
		}
		if(!check) {
			System.out.println(num+" is a prime number.");
		}
		else {
			System.out.println(num + " is not a prime number.");
		}



	}

}
```

OUTPUT:

```
Enter a number:
22
22 is not a prime number.
```