Class Recursor

```java
import java.util.Scanner;
public class recursor {

    public static int fibbonacci(int x){
        if(x == 0) return 0;
        if(x == 1) return 1;
        return fibbonacci(x-1) + fibbonacci(x-2);
    }
    public static int gcd(int x, int y){
        if(y == 0) return x;
        return gcd(y, x%y);
    }
    public static double product(int x, int y){
        if(y == 0) return 0;
        else if(y < 0)
            return -x + product(x, y+1);
        else
            return x + product(x, y-1);
    }
    public static double power(int x, int y){
        if(y == 0) return 1;
        else if(y < 0)
            return 1.0/x * power(x, y+1);
        else
            return x * power(x, y-1);
    }
    public static void main(String [] args){
        Scanner input = new Scanner(System.in);
        System.out.print("Enter a number to find its fibbonacci: ");
        int num = input.nextInt();
System.out.println("The fibbonacci of " + num + " is: " + fibbonacci(num));
        System.out.print("Enter x and y to find their gcd: ");
        int x = input.nextInt(); int y = input.nextInt();
        System.out.println("The gcd of x and y is: " + gcd(x,y));
        System.out.print("Enter x and y to find their product: ");
        x = input.nextInt(); y = input.nextInt();
        System.out.println("x * y = " + product(x,y));
        System.out.print("Enter x and y to find x^y: ");
        x = input.nextInt(); y = input.nextInt();
        System.out.println("x ^ y = " + power(x,y));
    }
}
```

Sample Run

```
Enter a number to find its fibbonacci: 8
The fibbonacci of 8 is: 21
Enter two numbers x and y to find their gcd: 27 18
The gcd of x and y is: 9
Enter x and y to find their product: 4 5
x * y = 20.0
Enter x and y to find x^y: 2 5
x ^ y = 32.0
```