1.Problem Description: 1.Problem Description: In this project i try to use for loops, constant and methods due to obligations that we own to make this project. Some points which are putting fibonacci numbers in a triagle and finding the sum of factorials digits i.e. create some problem. Yet, at the end i change the codes a little bit and i finished.

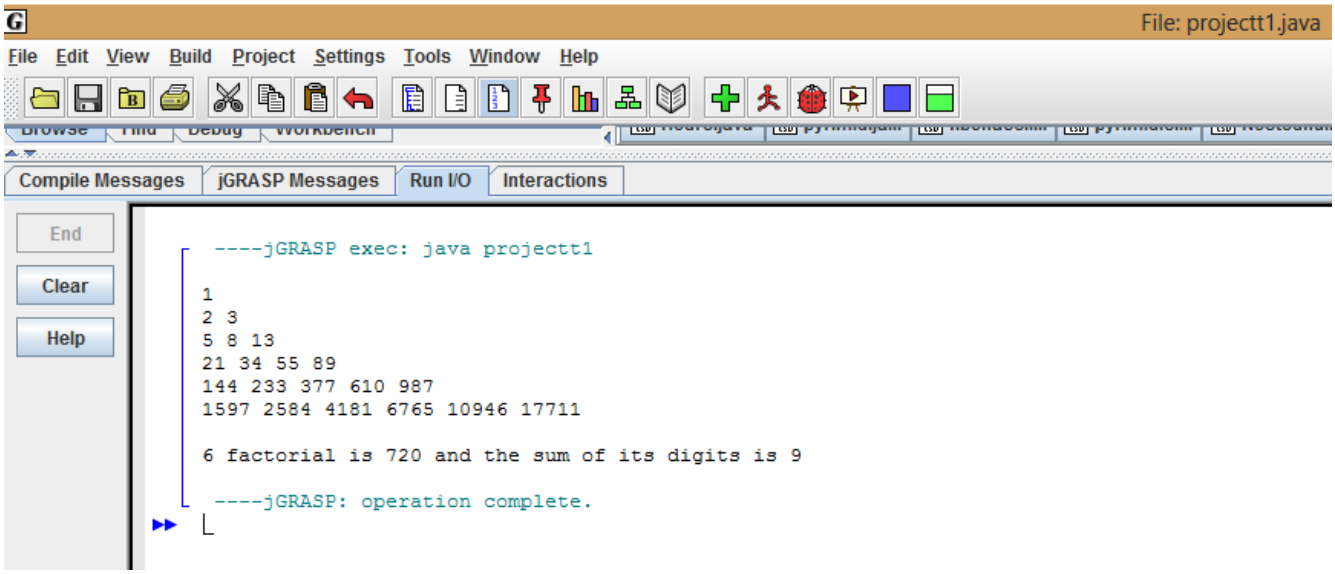
2.Problem Solution: There are 2 different methods in almost every part of this project. One of them which is fibonacci () is the simplest one and the factorial() is a little bit more complicate. In these methods, the number we give at very first which is SIZE changes the result. The method fibonacci includes one main for loop and one more inside of it. In factorial,method , there are 2 different for loops which give us the result for factorial and sum of the digits of it.

3.Implementation:

```
1 public class projectt1 {
 2    public static final int SIZE=6;    //this constant connect with the
methods and it controls the system.
 3       public static void main(String[] args){
 4
 5          fibo();     //first part of the project, also represents the
first method.
 6          System.out.println();
 7          factorial(); //second part of the project's method.
 8
 9       }
10          public static void fibo(){  //first method.
11             int a=1;  //with sum and a, i can find the seri.
12             int sum=2;
13
14                for(int round=0; round<SIZE; round++){ // gives us the
line number. for ex, if size 5, there is 5 lines.
15                   for(int x=0; x<=round; x++){     //it seperate the
numbers as in the project. first line there is 1 number, in third line
there are 3 numbers...
16                      System.out.print(sum-a+" ");
17                      a=sum-a;                        //all 3 of these
help me in fibonacci numbers.
18                      sum=a+sum;
19                   }
20                   for(int space=SIZE-1; space>0; space--){  //this for
loop is not necesarry, just for knowing there are spaces.
21                   System.out.print(" ");
22                   }
23                   System.out.println();  //drop the line to the one
down.
24                }
25          }
26
27          public static void factorial(){  //second part, second method.
28             int n= 1;   //the number n is changable, it only for
identifies the "n".
29             int x= 0;
```

```
30
31                  for(int i=SIZE; i>=1; i--){ //like in first part, by this
we know how many loop we have.
32                      n=n*i;
33                  }
34                  for (int i=n; i>0; i=i/10){ //by dividing 10 and getting
mod, we can plus every digits of the numbers.
35                      x += i%10;
36                  }
37                      System.out.println(SIZE+" factorial is "+n+ " and the
sum of its digits is "+x);
38              }
39 }
```

4.Output Of The Program:



5.Conclusion: With spending days on making it work correctly, i learn how to use for loops, constant and methods at the end. Finally, there appears the program which works correctly.