**GENESE SOFTWARE SOLUTIONS**

**Internship Written Test**

**Total Time: 1.5 hrs**

*You can use any programming language to solve these questions. For the below question*

1. Write a txt file where you describe the algorithm that you used to solve the problem (eg. problem1.txt)

Ans🡺

Step 1: first initialize the max number and the sum;

**int** f= 4000000;

**int** sum = 0;

Step 2: then create a for loop for iteration

**for**(**int** i=1;i<=f;i++)

Step 3: the in an if condition specify the numbers to be even

**if**(i%2==0)

Step 4: then sum+=i;

sum = i;

i = sum+i;

where, the formula for sum is given, and the next number is assigned to initial number and the nex numbers is fed to the sum;

Step 5: print the result.

1. Write a program file which prints one line which is the output (eg. problem1.py if you do it in python)
2. Create a git repository and push your files to github.com and write the repository link below.

https://github.com/Shuhaib123/test/tree/master

1. Each new term in the Fibonacci sequence is generated by adding the previous two terms. By starting with 1 and 2, the first 10 terms will be:

1, 2, 3, 5, 8, 13, 21, 34, 55, 89, ...

By considering the terms in the Fibonacci sequence whose values do not exceed four million, find the sum of the even-valued terms.

**package** fibonacci;

**public** **class** Sum {

**public** **static** **void** main(String[] args) {

**int** f= 4000000;

**int** sum = 0;

**for**(**int** i=1;i<=f;i++) {

**if**(i%2==0) {

sum+=i;

sum = i;

i = sum+i;

}

}

System.***out***.println(sum);

}

}