**JAVA PROGRAMMING**

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**Problem**

**To find strings of genes out of a genome that should start with ATG and end with TAG or TGA or TAA.**

**Code**

package stringhandling;

import java.util.Scanner;

public class StringHandling2 {

public static void main(String[] args)

{

Scanner scan=new Scanner(System.in);

System.out.println("Enter the genome as a string: ");

String gene=scan.nextLine();

String genome=gene.toUpperCase();

String str;

String[] ls=new String[15];

int con=0;

int flag=0;

for(int i=0;i<genome.length()-3;i++)

{

if(genome.substring(i).startsWith("ATG"))

{

str=genome.substring(i+3);

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

{

if(str.substring(j).startsWith("TAA")||str.substring(j).startsWith("TGA")||str.substring(j).startsWith("TAG"))

{

ls[con]=genome.substring(i+3,i+j+3);

con=con+1;

flag=1;

}

}

}

}

for(int i=0;ls[i]!=null;i++)

System.out.println(ls[i]);

if(flag==0)

System.out.println("Genes cannot be found!!");

}

}

**Output**

run:

Enter the genome as a string:

TTATGTTTTAGGGATGGGGCTAA

Genes Found are

TTT

TTTTAGGGATGGGGC

GGGC

BUILD SUCCESSFUL (total time: 4 seconds)

**Screenshot**

