```
1st Notes
```

```
//Omkar
//2-10-2020
//Desc: Split up a single five digit integer
import java.util.Scanner;
public class day5_scissor
{
       public static void main(String[] args)
       {
               Scanner input = new Scanner(System.in);
              //Number and types of variables:
              int num; //user input value
              int output1, output2, output3, output4, output5;
              //Ask the user to type in a number
               System.out.println("Enter a 5 digit integer:");
              num = input.nextInt();
              //Calculate individual Digits
              output1 = num / 10000;
              output2 = (num % 10000) / 1000;
              output3 = (num % 1000) / 100;
              output4 = (num \% 100) / 10;
              output5 = (num \% 10) / 1;
              //Print the results
              System.out.println(output1+" "+output2+"
                                                           "+output3+" "+output4+"
"+output5);
       }
}
```

<u>Output</u>

```
C:\IntroPd8Spring\Day 5>javac day5_scissor.java
C:\IntroPd8Spring\Day 5>java day5_scissor
Enter a 5 digit integer:
54321
5     4     3     2     1
C:\IntroPd8Spring\Day 5>_
```

2nd Notes

```
//Omkar
//2-10-2021
//Description: Quadratic Formula Solver
import java.util.Scanner;
public class day5_QuadSolve
{
       public static void main(String[] args)
       {
               Scanner input = new Scanner(System.in);
               //determine variables:
               double a, b, c;
               double discriminant; //b^2 - 4ac
               double x1, x2;
               //ask the user for a,b,c:
               System.out.println("Enter a, b, and c:");
               //allow the user to enter a,b,c:
               a = input.nextDouble();
               b = input.nextDouble();
               c = input.nextDouble();
               //use quadratic formula with a,b,c values:
               x1 = (-b + Math.sqrt(b*b - 4*a*c)) / (2*a);
               x2 = (-b - Math.sqrt(b*b - 4*a*c)) / (2*a);
               //print out results:
               System.out.println(x = +x1+ \text{ and } +x2);
       }
}
```

Output:

```
C:\IntroPd8Spring\Day 5>javac day5_QuadSolve.java
C:\IntroPd8Spring\Day 5>java day5_QuadSolve
Enter a, b, and c:
1 4 3
x = -1.0 and -3.0
C:\IntroPd8Spring\Day 5>
```