```
if(intermediateNum > 10)
{
     counter ++;
}
```

Error with syntax.

```
{
     int intermediateNum, counter =0 ;

     intermediateNum = num/10;

     if(intermediateNum > 10)
     {
          counter ++;
     }
}
```

The counter variable should have been initialized if its going into an if-else statement.

```
============================================== DIGITS FINDER ==============================================
Hello User. This program finds and returns the total number of digits for any given integer value
Please enter an integer:
-18249741
1
```

The program always returns 1 no matter what number is typed.

```
  int absValue ,intermediateNum, counter = 1 ;
```

Problem is due to the fact that the counter variable resets to one every recursion. The counter variable needs to be removed and the code logic should be altered.

```java
public int findDigits(int num)
{
    int absValue ,intermediateNum;

    absValue = Math.abs(num);

    intermediateNum = absValue/10;

    if(intermediateNum < 10)
    {
        return 1;
    }

    else
    {
        return(1+findDigits(intermediateNum));
    }

}
```

partially fixed by changing the logic to not include a counter and just create a recursive loop of addition. However now the result is always 1 less than it should be.

```java
public int findDigits(int num)
{
    int absValue ;

    absValue = Math.abs(num);


    if(absValue < 10)
    {
        return 1;
    }

    else
    {
        return(1+findDigits(absValue/10));
    }
```

the error was due to dividing the absolute value by 10 before be got to the if-else loop which we dont account for in the digits leading to one lost digit.fixed by getting rid of the intermediateNum variable and just using the absValue variable dividing by 10 in the return statement itself.

```
============================================ DIGITS FINDER ============================================
Hello User. This program finds and returns the total number of digits for any given integer value
Please enter an integer:
901284098124
Exception in thread "main" java.util.InputMismatchException: For input string: "901284098124"
        at java.base/java.util.Scanner.nextInt(Scanner.java:2290)
        at java.base/java.util.Scanner.nextInt(Scanner.java:2238)
        at Mastery.NumDigits.digitsFinder.main(digitsFinder.java:18)
```

The program doesn't work for very large numbers, likely due to the memory capacity of int variables (32 bits).

Not an error, just a limitation of this program, the max value that can be entered is .