

## Assignment 3 - SSN Checker

The purpose of this assignment is to assess your understanding of **text processing**, **exception handling**, **writing custom exception classes**, and documenting using **java documentation comments** by creating an application that reads a social security number (SSN) from user input and checks to see if it meets the criteria for a valid SSN.

### Task

**Note: All classes written for this assignment must include java documentation comments.**


- (1) Write a custom exception class that, at a minimum, has a no-args constructor that passes an appropriate message to the superclass constructor. This exception class will be thrown in the event that an invalid SSN has been encountered. Be sure to give this class an appropriate name.
- (2) Write an application (i.e., a class with a main method, right?) that gets a social security number from the user and checks whether it is valid. To do this, include a method named `isValidSocial` that accepts a `String` parameter for the SSN to validate and returns **whether** it is valid. *Valid SSNs contain exactly nine digits and are formatted as `DDD-DD-DDDD` (where `D` is a digit).* If the password does not meet any of the criteria, throw a `SocialSecurityException` created in (1), otherwise, return `true`.


**Note: To determine if the SSN is in the correct format (i.e., `DDD-DD-DDDD`), you must use the `split` method**

- (3) In the main method, read an SSN as user input and check whether it is valid using the method created in (2). Remember that your `isValidSocial` method throws your exception from (1), so you must handle it using a `try-catch` block. If the SSN is valid, display an appropriate message. If the exception is thrown, display its default message

### Sample

Here are a few sample runs of the application. User input in **bold**.

```
Enter a social security number: 294665686   
Invalid social. Reason: Social Security Numbers must be in the format of  
DDD-DD-DDDD, where D is a digit.
```

```
Enter a social security number: 123-48-9095   
That SSN meets all the criteria!
```

```
Enter a social security number: 92E-22-3639   
Invalid social. Reason: Social Security Numbers must be in the format of  
DDD-DD-DDDD, where D is a digit.
```

### Deliverable

Test your application and take a screenshot of a successful run.

Submit your Java file(s) and the screenshot to the appropriate dropbox.