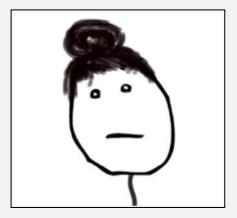
You are helping to write a registration program for a children's soccer league. The task is to generate an identification code for players that will have various pieces of the player's personal information encoded within it. That way, the registration of players can proceed quickly just on the basis of the ID code. The design specification is shown in the figure below. The particular pieces of data that are used to create the ID on the top of the card are color-coded and referenced to the personal data block.





## **Personal data**

Name: **Jessica Stick** 

Location: Miami, FL 33141

DOB: **7/12/20**07

Gender: **female** 

The ID code is composed of only upper-case letters, numbers, and hyphens. The format of the code will not change, it will always be in the form of LL-NNNNN-LLL, where L is an upper-case letter, N is a number and the three parts are separated by two hyphens (minus signs).

The player information will be entered into the system by a volunteer and the code will be generated immediately afterwards. Since the volunteers do not have any data entry experience, you cannot make many assumptions about the quality of the entered data. However, the following assumptions can be made:

- Name will always be composed of two words separated by a space (i.e., no middle initial, middle name, or just first name) but the words may or may not be capitalized.
- Location will always have a city (a city may contain multiple words, e.g., Los Angeles) followed by a comma and a space, then two letter state followed by a space and finally a 5-digit zip code.
- Date of birth will be in the format Month/Day/Year where month and day may be either one or two digits long, year will be 4 digits long and the separating character will be a forward slash (/). For example, all of these formats are valid: 1/1/2008, 10/6/2010, 8/12/2009, 11/27/2003.
- Gender will be either spelled out as male or female, or entered as a one letter code M or F. Either of these four choices may or may not be capitalized.

## **Requirements:**

Create a program that prompts the user to enter four pieces of information on four separate lines and reads this information into four String variables. Then use various string methods to create the ID code based on the inputs, taking into account the assumptions about data quality given above. Follow these steps:

- 1. Prompt user to enter Name. Use scanner's method nextLine() to read the name into a string variable.
- 2. Prompt user to enter Location. Use scanner's method nextLine() to read the location into a string variable.
- 3. Prompt user to enter DOB. Use scanner's method nextLine() to read the date of birth into a string variable.
- 4. Prompt user to enter Gender. Use scanner's method nextLine() to read the gender into a string variable.
- 5. Create the ID code by extracting various pieces of data and concatenate them to form the final code. The pieces are:
  - a. first letter of the first name
  - b. first letter of the last name
  - c. hyphen
  - d. last three digits of the 5-digit zip code
  - e. last two digits of the year of the date of birth
  - f. hyphen
  - g. first letter of the gender
  - h. two-letter code of the state
- 6. Make sure the ID code has all the letters in upper case only.
- 7. Print out the ID code to the screen.

## Hint:

Use the following methods of the String class to do the string manipulation. There can be multiple ways to achieve the same result. Not all of these methods are necessary to complete the assignment, but all could potentially be useful, depending on how you approach the task:

```
substring(int x, int y)
substring(int x)
indexOf(String s)
lastIndexOf(String s)
length()
concat(String s)
toUppercase()
```

## Sample output

```
run:
 Enter Name:
 Jessica Stick
 Enter Location:
Miami, FL 33141
 Enter DOB:
 7/12/2007
 Enter Gender:
 female
 Code: JS-14107-FFL
BUILD SUCCESSFUL (total time: 38 seconds)
 run:
 Enter Name:
 mike myers
 Enter Location:
 los angeles, ca 90001
 Enter DOB:
 5/25/2011
 Enter Gender:
 Code: MM-00111-MCA
 BUILD SUCCESSFUL (total time: 21 seconds)
run:
Enter Name:
MaryJane smith
Enter Location:
Miami Shores, fl 33138
Enter DOB:
1/1/2000
Enter Gender:
FEMALE
Code: MS-13800-FFL
BUILD SUCCESSFUL (total time: 2 minutes 11 seconds)
 run:
 Enter Name:
Pablo Estevez
 Enter Location:
New York, NY 12345
 Enter DOB:
 12/24/1985
 Enter Gender:
 Code: PE-34585-MNY
BUILD SUCCESSFUL (total time: 1 minute 12 seconds)
```