Tutorial 9: Strings

This tutorial will provide practice at using methods to manipulate strings

Task 1: Initials 

Write a program to prompt the user to enter **a single line** containing their full name (first name, second name and surname) and output their three initials.

You can assume that the user always types three names and does not include any unnecessary spaces.

Hints use only one read operation to get the full name use the string methods to work out where the first and last space characters are
remember that character locations in strings start at 0

Step 1: Create a NetBeans project

- create a new project called `InitialsProj` in a folder called `T9`

Step 2: Write source code

- add a new file called `Initials` to the `InitialsProj` project
- write code to input the user's name and output their initials

Step 3: Test your program and take screen shots

- run your program
- take a screen shot of the output and save it in your project folder as `Initials.jpg`

Portfolio requirements

- The NetBeans project for this completed task
- `Initials.jpg` from step 3, containing a screen shot of the output

Task 2: Hangman 

Write a program to play a simplified version of Hangman. The program should prompt a user for a word to be guessed and then display dashes in place of each of the letters:

```
Word to be guessed:  scratch
Display:              -------
```

A second player is then prompted to guess letters in the word. If the letter is present, all occurrences of that letter should be replaced and the word displayed again:

```
Letter guessed:       c Display:
      -c---c-
```

When all the letters have been correctly guessed, the program should output the number of guesses it took to get the word.

Step 1: Analyse the problem

- write pseudo-code for the Hangman game and store it in a file called `HangmanPseudo.doc`

Step 2: Create a NetBeans project

- create a new project called `HangmanProj` in a folder called `T9`

Step 3: Write source code

- add a new file called `Hangman` to the `HangmanProj` project
- using the analysis from step 1, write code to play the simplified game of Hangman

Step 4: Test your program and take screen shots

- run your program
- take a screen shot of the output and save it in your project folder as `Hangman.jpg`

Portfolio requirements

- The NetBeans project for this completed task
- `HangmanPseudo.doc` from step 1 containing your analysis of the Hangman game
- `Hangman.jpg` from step 4, containing a screen shot of the output

Task 3: Infinite Initials 

This task is similar to Task 1, except that your program should accept user input of any number of names. Your program is to ignore any extra spaces, whether they be at the leading, trailing, or in the middle. Hyphenated names should result in hyphenated initials.

```
User input:      "  Joseph     David  Kingsley-Montgomery     "
Initals output: J.D.K-M.
```

Portfolio requirements

- The NetBeans project for this completed task
- `InfiniteInitials.doc` containing your analysis of the problem
- `InfiniteInitials.jpg` containing a screen shot of your application's output