EXERCISE: Revision
STIA1123 –PROGRAMMING II

1. Fill in the blanks in the program below as follows:
(a) declare the variable `town` as a reference to a `String` object and initialize it to " UUM Sintok".
(b) write an assignment statement that invokes the length method of the `String` class to find the length of the `college String` object and assigns the result to the `stringLength` variable
(c) complete the assignment statement so that `change1` contains the same characters as `college` but all in upper case
(d) complete the assignment statement so that `change2` is the same as `change1` except all capital O's are replaced with the asterisk (*) character.
(e) complete the assignment statement so that `change3` is the concatenation of `college` and `town` (use the `concat` method of the `String` class rather than the + operator)

```
// ***************************************************
// StringExercise.java
//
// Play with String objects
// ***************************************************
public class StringExercise
{
 public static void main (String[] args)
 {
 String college = new String ("College of Arts and Sciences");
 _____; // part (a)
 int stringLength;
 String change1, change2, change3;
 _____; // part (b)
 System.out.println (college + " contains " + stringLength + "
characters.");
 change1 = _____; // part (c)
 System.out.println ("The string is all in upper case: " + change1);
 change2 = _____; // part (d)
System.out.println ("All capital O's are replaced with the asterisk
character: " + change2);
 change3 = _____; // part (e)
 System.out.println ("The final string is " + change3);
 }
}
```

2. Write a program called "`FunnyString`" that asks the user to enter a favourite color, food, animal and the first name of a friend. Use a `Scanner` object and read one thing per line. The program should than print the following: For example if the user entered blue for color, burger for food, cat for the animal and Jack for the friend the output will be:

```
I had a dream that Jack ate a blue cat  and said it tasted like burger!
```

3. Write a program that read a string for a date in the format day/month/year and displays it as in the format day.month.year. For example if the input is 13/09/18 the output should be 13.09.18 .

   Hint: Search in the class `String` for the appropriate method to solve this problem.

4. Write a program that reads a four-digit number (such 2018) as a `String` and then display it one digit per line like so:

```
2
0
1
8
```

   (Use `charAt()` method from `String`, Think about the right type for the variables you use).

   Next, print the sum of the digits.
   Hint: Use `Integer.parseInt()` to convert digits to integers.