**EXERCISE 1**

1. Fill in the blanks in the program below as follows:

(a) declare the variable town as a reference to a String object and ini\_alize 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 concatena\_on of

college and town (use the concat method of the String class rather than the +

operator)

Answer:

import java.util.Scanner;

public class StringExercise {

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

System.out.println("<EXERCISE 1>");

String college = new String ("College of Arts and Science");

String town = " UUM Sintok"; // PART (A)

int stringLength;

String change1, change2, change3;

stringLength = college.length(); // PART (B)

System.out.println(college + " contains " + stringLength + " characters.");

change1 = college.toUpperCase(); // PART (C)

System.out.println("The string is all in upper case: " + change1);

change2 = change1.replace('O', '\*'); // PART (D)

System.out.println("All capital O's are replaced with the asterisk\n" +

"character:" + change2);

change3 = college.concat(town); // 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 !

Answer:

import.java.util.Scanner;

public class FunnyString {

public static void main(String[] args) {

Scanner sc = new Scanner (System.in);

String color, food, animal, name; // Declare String variable

System.out.print("Input your fav color: ");

color = sc.next();

System.out.print("Input your fav food: ");

food = sc.next();

System.out.print("Input your fav animal: ");

animal = sc.next();

System.out.print("Input your friend's first name: ");

name = sc.next();

System.out.println("I had a dream that "+name+" ate a " +color+" " + animal + " and said it tasted like "+food+" !");

}

}

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.

import.java.util.Scanner;

public class DateFormatChange {

public static void main(String[] args) {

Scanner sc = new Scanner (System.in);

System.out.println("Please input a date (Day/Month/Year):");

String date1 = sc.next();

String date2 = date1.replace('/','.'); // Change the format from dd/mm/yy to dd.mm.yy

System.out.println("New format is: \n" + date2);

System.out.println(""); //Print the new format

}

}

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.

Answer:

import.java.util.Scanner;

public class ReadString {

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

System.out.print("Input 4 digit numbers: ");

String numb = sc.nextLine();

for(int i = 0; i<numb.length();i++){

System.out.println(numb.charAt(i));

}

int total = 0, x = Integer.parseInt(numb);

while(x>0){

total+= x%10;

x/=10;

}

System.out.println("Sum of the digits: " +total);

}

}