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| **Date Assigned: 1/25/16** | **Date Due: 1/27/16** |
| **Unit:** Language Basics | **Turn In List:** **1. This document** |
| *“I will understand and use strings appropriately in programming.”* | |

**Title: Title**

**Content Objectives:** Students will familiarize themselves with creating, initializing, splicing and formatting strings.

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| **Starter Activity** |
| public class Test{    public static void main(String args[]) {  String fullName = new String("Vikrant Ragula");  System.out.println(fullName);  }  } |

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| **Assignment:** |
| Students will use the following websites and internet searches to complete the table below:   * **C++ Strings:**[**http://www.tutorialspoint.com/cplusplus/cpp\_constants\_literals.htm (Links to an external site.)**](http://www.tutorialspoint.com/cplusplus/cpp_constants_literals.htm) * **C++ Literals:**[**http://www.tutorialspoint.com/cplusplus/cpp\_constants\_literals.htm (Links to an external site.)**](http://www.tutorialspoint.com/cplusplus/cpp_constants_literals.htm) * **C++ String Methods:**[**http://www.cplusplus.com/reference/string/string/ (Links to an external site.)**](http://www.cplusplus.com/reference/string/string/) * **Java Strings:**[**http://www.tutorialspoint.com/java/java\_strings.htm (Links to an external site.)**](http://www.tutorialspoint.com/java/java_strings.htm) * **Java Literals:**[**http://www.tutorialspoint.com/java/java\_quick\_guide.htm (Links to an external site.)**](http://www.tutorialspoint.com/java/java_quick_guide.htm) * **Python Strings:**[**http://www.tutorialspoint.com/python/python\_strings.htm (Links to an external site.)**](http://www.tutorialspoint.com/python/python_strings.htm)   **C# Strings:**[**https://msdn.microsoft.com/en-us/library/system.string(v=vs.110).aspx (Links to an external site.)**](https://msdn.microsoft.com/en-us/library/system.string(v=vs.110).aspx) |

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| **Include Sample Code Concepts Below (copy and paste lines from editor)** | |
| Code necessary to use the String class in your program | Really C++ ONLY! |
| Code necessary to convert fullName to all upper case characters | public class Test{  public static void main(String args[]) {  String fullName = new String("Vikrant Ragula");  fullName = fullName.toUpperCase();  System.out.println(fullName);  }  } |
| Code necessary to convert fullName to all lower case characters | public class Test{  public static void main(String args[]) {  String fullName = new String("Vikrant Ragula");  fullName = fullName.toLowerCase();  System.out.println(fullName);  }  } |
| Code necessary to concatenate your name variable with your age in years. Output would be something like: “FirstName LastName is 17” | public class Test{  public static void main(String args[]) {  String fullName = new String("Vikrant Ragula ");  int personAge = 14;  System.out.println(fullName + "is " + personAge + ".");  }  } |
| Syntax for including the forward slash in a string or print statement. | //For Forward Slash  public class Test{  public static void main(String args[]) {  String fullName = new String("/Vikrant Ragula ");  int personAge = 14;  System.out.println(fullName + "is " + personAge + ".");  }  }  // Backslash  public class Test{  public static void main(String args[]) {  String fullName = new String("\\Vikrant Ragula ");  int personAge = 14;  System.out.println(fullName + "is " + personAge + ".");  }  } |
| Code necessary to retrieve the length of fullName string (see starter) | public class Test{  public static void main(String args[]) {  String fullName = new String("VikrantRagula");  int letters = fullName.length();  System.out.println(letters);  }  } |
| Research: Code to append a string | public class Test{  public static void main(String args[]) {  String firstWord = new String("Cape");  String lastWord = new String("Cod");  String fullWord = new String(firstWord + " " + lastWord);  System.out.println(fullWord);  }  } |
| Research: Code to split or separate a string (substring) into two or more values | public class Test{  public static void main(String args[]) {  String string = "Vikrant-Ragula";  String[] parts = string.split("-");  String part1 = parts[0];  String part2 = parts[1];  System.out.println(part1 + " " + part2);  }  } |

Psuedocode an English to Pig Latin converter requesting a first and/or last name from user.

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You may work in pairs or small groups to code a ***working*** “PigLatin” converter that alters a first and/or last name to traditional Pig Latin. (Python Hint: Unit 3 in CodeAcademy!) (Java Hint: research substring!) (C++ research vector)

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