String / StringBuilder problems

1. program which accepts 8 names from console and display the following

a. names which start with vowel

b. names which ends with Reddy (uppercase or lowercase)

c. names containing ab any where

d. names whose length > 5

StringProblem1.java

**import** java.util.Scanner;

**public** **class** SpringProblem1 {

**public** **static** **void** main(String[] args) {

/\*

Scanner sc = new Scanner(System.in);

String names[] = new String[8];

System.out.println("please enter 8 names");

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

names[i] = sc.nextLine();

}

\*/

String names[] = { "elias", "Kumar reddy", "abhishek", "Rahul",

"KISHORE REDDY", "Uday Kuamr", "srihari", "ramabi"

};

// Display Names which start with vowel

System.***out***.println("=========Names starting with vowel===========");

**for** (String name : names) {

**if** (name.matches("^[aeiouAEIOU].\*"))

System.***out***.println(name);

}

// Display Names which end with reddy (uppercase or lowercase)

System.***out***.println("==========Names ending with REDDY===========");

**for** (String name : names) {

**if** (name.toUpperCase().endsWith("REDDY"))

System.***out***.println(name);

}

// Display Names which contain "ab" anywhere in the name

System.***out***.println("==========Names containing ab ===========");

**for** (String name : names) {

**if** (name.contains("ab"))

System.***out***.println(name);

}

// Display Names having more than 5 characters

System.***out***.println("==========Names with length > 5 characters===========");

**for** (String name : names) {

**if** (name.length() > 5)

System.***out***.println(name);

}

}

}

1. program to accept a sentence from console and change all the vowels with a corresponding digit

example: hello how are you --> to be converted to --> h2ll4 h4w 1r2 y45

StringProblem2.java

**import** java.util.Scanner;

**public** **class** StringProblem2 {

**public** **static** **void** main(String[] args) {

Scanner sc = **new** Scanner(System.***in***);

String str = sc.nextLine();

// convert str to StringBuilder

StringBuilder sb = **new** StringBuilder(str);

// check every character and change if it is vowel

String digit="";

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

String s = sb.substring(i, i + 1);

**if** (s.matches("[aeiou]")) {

**switch** (s.toUpperCase()) {

**case** "A":

digit = "1"; **break**;

**case** "E":

digit = "2"; **break**;

**case** "I":

digit = "3"; **break**;

**case** "O":

digit = "4"; **break**;

**case** "U":

digit = "5";

}

sb.replace(i, i + 1, digit);

}

}

str = sb.toString();

System.***out***.println(str);

}

}

1. program with a method which takes a String as argument and returns a converted String after converting all digits in to the words

example: AB3X4D --> converted to --> ABthreeXfourD

StringProblem3.java

**public** **class** StringProblem3 {

**public** **static** **void** main(String[] args) {

String line = "abc2def5xyz8hell44pqr9ddd0abcd";

String changedLine = *changeText*(line);

System.***out***.println(changedLine);

}

**static** String changeText(String str) {

StringBuilder sb = **new** StringBuilder(str);

// string values representing each digit

String names[] = { "zero", "one", "two", "three",

"four", "five", "six", "seven", "eight", "nine" };

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

String s = sb.substring(i, i + 1);

**if** (s.matches("[0-9]")) {

**int** x = Integer.*parseInt*(s);

//pickup string value based on x

String code = names[x];

sb.replace(i, i + 1, code);

}

}

**return** sb.toString();

}

}