**SAVEETHA SCHOOL OF ENGINEERING**

**SAVEETHA INSTITUTE OF MEDICAL AND TECHNICAL SCIENCES**

**INSTITUTE OF PLACEMENT AND TRAINING**

**CSA09 –JAVA PROGRAMMING**

1. **Write a program to reverse a word using loop? (Not to use inbuilt functions)**

**Sample Input:**

**String: TEMPLE**

**Sample Output:**

**Reverse String: ELPMET**

**import** java.util.Scanner;

**public** **class** a10 {

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

**int** i;

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

System.***out***.println("String: ");

String str = sc.nextLine();

String s2 ="";

**for**(i=(str.length()-1);i>=0;i--)

{

System.***out***.print(str.charAt(i));

}

}

}

1. **Write a program to convent the given string to integer?**

**Sample Input:**

**String: 1234**

**Sample Output:**

**Out put String: 1234**

**import** java.util.Scanner;

**public** **class** a10 {

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

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

System.***out***.println("String: ");

String str = sc.nextLine();

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

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

}

}

1. **Write a program to check the entered user name is valid or not. Get both the inputs from the user.**

**import** java.util.Scanner;

**public** **class** a10 {

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

**int** i,s=0;

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

System.***out***.println("Enter username: ");

String str1 = sc.nextLine();

System.***out***.println("Reenter Username: ");

String str2 = sc.nextLine();

**if**(str1.length()==str2.length())

{

**for**(i=0;i<str1.length();i++)

{

**if**(str1.charAt(i)!=str2.charAt(i))

{

s=s+1;

}

}

**if**(s>0)

System.***out***.println("Invalid entry");

**else**

System.***out***.println("Correct entry");

}

**else**

System.***out***.println("Invalid entry");

}

}

1. **Write a program that would sort a list of names in alphabetical order Ascending or Descending, choice get from the user?**

**Sample Input:**

**Banana**

**Carrot**

**Radish**

**Apple**

**Jack**

**Order(A/D) : A**

**Sample Output:**

**Apple**

**Banana**

**Carrot**

**Jack**

**Radish**

**import** java.util.Scanner;

**import** java.util.\*;

**public** **class** a10 {

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

**int** i,s=0;

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

System.***out***.println("Enter the numeber of input: ");

s = sc.nextInt();

List<String> list=**new** ArrayList<String>();

**for**(i=0;i<s;i++)

{

list.add(sc.nextLine());

}

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

}

}

1. **Write a program to print the special characters separately and print number of Special characters in the line?**

**import** java.util.Scanner;

**public** **class** a10 {

**private** **static** Scanner *sc*;

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

String aldisp\_str;

**int** i, alph, digi, spl;

alph = digi = spl = 0;

**char** ch;

String s="";

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

System.***out***.print("\nPlease Enter Alpha Numeric Special String = ");

aldisp\_str = *sc*.nextLine();

**for**(i = 0; i < aldisp\_str.length(); i++)

{

ch = aldisp\_str.charAt(i);

**if**(ch >= 'a' && ch <= 'z' || ch >= 'A' && ch <= 'Z' ) {

alph++;

}

**else** **if**(ch >= '0' && ch <= '9') {

digi++;

}

**else** {

s=s+ch;

spl++;

}

}

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

System.***out***.println("Number of Special Characters = " + spl);

}

}

1. **Write a program to print the number of vowels in the given statement?**

**Sample Input:**

**Saveetha School of Engineering**

**Sample Output:**

**Number o vowels = 12**

import java.util.Scanner;

public class second1 {

public static void main(String[] args) {

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

System.*out*.print("Enter the string: ");

String str = input.nextLine();

int index = 0;

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

if (str.charAt(i) == 'a' ||str.charAt(i) == 'A' ||str.charAt(i) == 'e' ||str.charAt(i) == 'E' ||str.charAt(i) == 'i' ||str.charAt(i) == 'I' ||str.charAt(i) == 'o' ||str.charAt(i) == 'O' ||str.charAt(i) == 'u' ||str.charAt(i) == 'U' ) {

index = index+1;

}

}

System.*out*.println("Number of vowels="+ index);

}

}

1. **Write a program to print consonants and vowels separately in the given word**

**Sample Input:**

**Given Word: Engineering**

**Sample Output:**

**Consonants: n g n r n g**

**Vowels: e i e ei**

import java.util.Scanner;

public class second1 {

public static void main(String[] args) {

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

System.*out*.print("Enter the string: ");

String str = input.nextLine();

int index = 0;

String s1="",s2="";

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

if (str.charAt(i) == 'a' ||str.charAt(i) == 'A' ||str.charAt(i) == 'e' ||str.charAt(i) == 'E' ||str.charAt(i) == 'i' ||str.charAt(i) == 'I' ||str.charAt(i) == 'o' ||str.charAt(i) == 'O' ||str.charAt(i) == 'u' ||str.charAt(i) == 'U' )

{

s1=s1+str.charAt(i);

}

else

{

s2=s2+str.charAt(i);

}

}

System.*out*.println("Consonants="+ s2);

System.*out*.println("Vowels="+ s1);

}

}

1. **Write a program that finds whether a given character is present in a string or not. In case it is present it prints the index at which it is present. Do not use built-in find functions to search the character.**

**Sample Input:**

**Enter the string: I am a programmer**

**Enter the character to be searched: p**

**Sample Output:**

**P is found in string at index: 8**

**Note: Check for non available Character in the given statement as Hidden Test case.**

import java.util.Scanner;

public class second1 {

public static void main(String[] args) {

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

System.*out*.print("Enter a string: ");

String str = input.nextLine();

System.*out*.print("Enter a character to search: ");

char searchChar = input.nextLine().charAt(0);

int index = -1;

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

if (str.charAt(i) == searchChar) {

index = i;

break;

}

}

if (index == -1) {

System.*out*.println("The character is not present in the string.");

} else {

System.*out*.println("The character is present at index " + (index+1) + " in the string.");

}

}

}

1. **Write a program to arrange the letters of the word alphabetically in reverse order**

**Sample Input:**

**Enter the word: MOSQUE**

**Sample Output:**

**Alphabetical Order: U S Q O M E**

**Test Case:**

1. **HYPOTHECATION**
2. **MATRICULATION**
3. **MANIPULATION**

import java.util.Scanner;

public class second1 {

public static void main(String[] args) {

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

System.*out*.print("Enter a string: ");

String str = input.nextLine();

String s1="";

for (int i = str.length()-1; i > -1; i--)

{

s1=s1+str.charAt(i);

}

System.*out*.println("Reverse order="+s1);

}

}

1. **Write a program that accepts a string from user and displays the same string after removing vowels from it.**

**Sample Input & Output:**

**Enter a string: we can play the game**

**The string without vowels is: w cn ply thgm**

import java.util.Scanner;

public class second1 {

public static void main(String[] args) {

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

System.*out*.print("Enter the string: ");

String str = input.nextLine();

int index = 0;

String s1="",s2="";

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

if (str.charAt(i) == 'a' ||str.charAt(i) == 'A' ||str.charAt(i) == 'e' ||str.charAt(i) == 'E' ||str.charAt(i) == 'i' ||str.charAt(i) == 'I' ||str.charAt(i) == 'o' ||str.charAt(i) == 'O' ||str.charAt(i) == 'u' ||str.charAt(i) == 'U' )

{

s1=s1+str.charAt(i);

}

else

{

s2=s2+str.charAt(i);

}

}

System.*out*.println(s2);

}

}