1. What is mutable String in Java? Explain with an example.

Ans: Once if we create a string , on that string if we try to perform some operation and if those changes get reflected in the same object then such strings are called “Mutable String”.

public class Question1 {

public static void main(String []args){

String str1 = "World";

StringBuffer str2 = new StringBuffer("Hello");

String str12 = str1;

StringBuffer str22 = str2;

System.out.println("Initially: ");

System.out.println("str1: " + str1);

System.out.println("str2: " + str2);

System.out.println("str12: " + str12);

System.out.println("str22: " + str22);

str1.replace("H", "A");

str2.replace(0, 1, "A");

System.out.println("Finally: ");

System.out.println("str1: " + str1);

System.out.println("str2: " + str2);

System.out.println("str12: " + str12);

System.out.println("str22: " + str22);

}

}

1. Write a program to reverse a String.

Ans: public class Question2 {

public static void main(String[] args) {

StringBuffer str = new StringBuffer("PWSKILLS");

int low = 0;

int high = str.length() - 1;

while(low < high){

char lowIndexCharacter = str.charAt(low);

char highIndexCharacter = str.charAt(high);

str.setCharAt(low, highIndexCharacter);

str.setCharAt(high, lowIndexCharacter);

low++;

high--;

}

System.out.println(str);

}

}

1. Write a program to reverse a string sentence while preserving the position.

Ans: public class Question3 {

public static void main(String[] args) {

String str = "Think Twice";

String []arr = str.split(" ");

String result = "";

for(String i : arr){

StringBuffer strTemp = new StringBuffer(i);

int low = 0;

int high = strTemp.length() - 1;

while(low < high){

char lowIndexCharacter = strTemp.charAt(low);

char highIndexCharacter = strTemp.charAt(high);

strTemp.setCharAt(low, highIndexCharacter);

strTemp.setCharAt(high, lowIndexCharacter);

low++;

high--;

}

result = result + strTemp + " ";

}

System.out.println(result);

}

}

1. Write a program to sort a string alphabetically.

Ans: import java.util.Scanner;

public class Question4 {

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

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

String str = sc.nextLine().toUpperCase();

int arr[] = new int[26];

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

char ch = str.charAt(i);

if(ch <= 90 && ch >= 65){

arr[ch - 65]++;

}

}

String result = "";

for (int i = 0; i < 26; i++) {

while (arr[i] > 0) {

result = result + (char)(i + 65);

arr[i]--;

}

}

System.out.println(result);

}

}