**Question1:**

import java.util.\*;

public class abc

{

public static void main(String[]args)

{

Scanner in= new Scanner(System.in);

System.out.print("Enter your full name: ");

String fullname = in.nextLine();

int len= fullname.length();

System.out.print(fullname.charAt(0) + " ");

for (int i=1; i<len;i++)

{

char ch1 = fullname.charAt(i);

if (ch1 == ' ')

{

char ch2=fullname.charAt(i+1);

System.out.print(ch2 +" ");

}

}

}

}

**Question2:**

import java.util.\*;

class HelloWorld {

static final int N = 256;

static char MaxOccuringChar(String str) {

int ctr[] = new int[N];

int l = str.length();

for (int i = 0; i < l; i++)

ctr[str.charAt(i)]++;

int max = -1;

char result = ' ';

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

if (max < ctr[str.charAt(i)]) {

max = ctr[str.charAt(i)];

result = str.charAt(i);

}

}

return result;

}

public static void main(String[] args) {

Scanner sc= new Scanner(System.in); //System.in is a standard input stream

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

String str= sc.nextLine(); //reads string

System.out.print("You have entered: "+str);

System.out.println("Max occurring character in the given string is: " + MaxOccuringChar(str));

}

}

**Question 3:**

import java.util.\*;

class GFG{

static void printSubStr(String str, int low, int high)

{

for (int i = low; i <= high; ++i)

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

}

static int longestPalSubstr(String str)

{

// get length of input String

int n = str.length();

int maxLength = 1, start = 0;

// Nested loop to mark start and end index

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

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

int flag = 1;

// Check palindrome

for (int k = 0; k < (j - i + 1) / 2; k++)

if (str.charAt(i + k) != str.charAt(j - k))

flag = 0;

// Palindrome

if (flag!=0 && (j - i + 1) > maxLength) {

start = i;

maxLength = j - i + 1;

}

}

}

System.out.print("Longest palindrome subString is: ");

printSubStr(str, start, start + maxLength - 1);

// return length of LPS

return maxLength;

}

public static void main(String[] args)

{

String str = "abcdefgfedcyt";

System.out.print("\nLength is: "

+ longestPalSubstr(str));

}

}

**Question 4:**

import java.util.\*;

public class Main

{

public static void main(String[] args)

{

String str = "basasbgbty";

System.out.println("The given string is: " + str);

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

boolean unique = true;

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

if (i != j && str.charAt(i) == str.charAt(j)) {

unique = false;

break;

}

}

if (unique) {

System.out.println(" The first non repeated character in String is: " + str.charAt(i));

break;

}

}

}

}

**Question 5:**

import java.util.Arrays;

class Main

{

public static int getMissingNumber(int[] arr)

{

int n = arr.length;

int m = n + 1;

int total = m \* (m + 1) / 2;

int sum = Arrays.stream(arr).sum();

// the missing number is the difference between the expected sum and the actual sum

return total - sum;

}

public static void main(String[] args)

{

int[] arr = {1, 2, 3, 4, 5, 6, 7, 8, 9, 10,

11, 12, 13, 14, 15, 16, 17, 18, 19, 20,

21, 22, 23, 24, 25, 26, 27, 28, 29, 30,

31, 32, 33, 34, 36, 37, 38, 39, 40,

41, 42, 43, 44, 45, 46, 47, 48, 49, 50,

51, 52, 53, 54, 55, 56, 57, 58, 59, 60,

61, 62, 63, 64, 65, 66, 67, 68, 69, 70,

71, 72, 73, 74, 75, 76, 77, 78, 79, 80,

81, 82, 83, 84, 85, 86, 87, 88, 89, 90,

91, 92, 93, 94, 95, 96, 97, 98, 99, 100

};

System.out.println("The missing number is " + getMissingNumber(arr));

}

}

**Question 6:**

import java.util.\*;

public class Main

{

public static void main(String[] args)

{

String str = "blueberry";

System.out.println("The given string is: " + str);

System.out.println("After removing duplicates characters the new string is: " + removeDuplicateChars(str));

}

private static String removeDuplicateChars(String sourceStr) {

char[] arr1 = sourceStr.toCharArray();

String targetStr = "";

for (char value: arr1) {

if (targetStr.indexOf(value) == -1) {

targetStr += value;

}

}

return targetStr;

}

}