1)

package Day3;

public class StringOperations {

    public static void main(String[] args) {

        int totalLength = 0; // Variable to store the total length of all arguments

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

        for (String arg : args) {

            // Convert to uppercase

            String uppercase = arg.toUpperCase();

            System.out.println("Original: " + arg);

            System.out.println("Uppercase: " + uppercase);

            // Reverse the string

            String reversed = new StringBuilder(arg).reverse().toString();

            System.out.println("Reversed: " + reversed);

            // Check if it's a palindrome

            if (arg.equalsIgnoreCase(reversed)) {

                System.out.println("Palindrome: Yes");

            } else {

                System.out.println("Palindrome: No");

            }

            // Calculate length of the argument

            totalLength += arg.length();

            System.out.println();

        }

        // Print total length of all arguments

        System.out.println("Total length of all strings: " + totalLength);

    }

}

String Operations:

Original: madam

Uppercase: MADAM

Reversed: madam

Palindrome: Yes

Total length of all strings: 5

2)

package Day3;

public class Bingo {

    public static void main(String[] args) {

        if (args.length != 2) {

            System.out.println("Please provide exactly two numbers as input.");

            return;

        }

        int[] arr = {7, 25, 5, 19, 30}; // Hardcoded array

        boolean firstFound = false, secondFound = false;

        try {

            int num1 = Integer.parseInt(args[0]); // First argument

            int num2 = Integer.parseInt(args[1]); // Second argument

            // Check if num1 exists in the array

            for (int a : arr) {

                if (a == num1) {

                    firstFound = true;

                }

                if (a == num2) {

                    secondFound = true;

                }

            }

            // Determine output based on the matches

            if (firstFound && secondFound) {

                System.out.println("Bingo!");

            } else {

                System.out.println("Not Found");

            }

        } catch (NumberFormatException e) {

            System.out.println("Invalid input: Please enter valid integers.");

        }

    }

}

PS C:\Users\suhai\OneDrive\Desktop\Daily\_Assessment> java Day3.Bingo 3 29

Not Found

PS C:\Users\suhai\OneDrive\Desktop\Daily\_Assessment> java Day3.Bingo 7 29

Not Found

PS C:\Users\suhai\OneDrive\Desktop\Daily\_Assessment> java Day3.Bingo 7 25

Bingo!

13)

package Day3;

import java.util.\*;

public class LastNVowels {

    public static void main(String[] args) {

        Scanner scanner = new Scanner(System.in);

        // Take string input

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

        String inputString = scanner.nextLine();

        // Take the number of vowels to count

        System.out.println("Enter the number of vowels to count:");

        int n = scanner.nextInt();

        // Find vowels in the string

        String vowels = "aeiouAEIOU";

        StringBuilder foundVowels = new StringBuilder();

        // Traverse the string from the end

        for (int i = inputString.length() - 1; i >= 0; i--) {

            char ch = inputString.charAt(i);

            if (vowels.indexOf(ch) != -1) {

                foundVowels.append(ch);

                if (foundVowels.length() == n) {

                    break;

                }

            }

        }

        // Check if the number of vowels found is less than n

        if (foundVowels.length() < n) {

            System.out.println("Mismatch in Vowel Count");

        } else {

            // Print the last n vowels in reverse order (to correct their sequence)

            System.out.println(foundVowels.reverse().toString());

        }

        scanner.close();

    }

}

Enter a string:

testing

Enter the number of vowels to count:

2

ei

Enter a string:

testing

Enter the number of vowels to count:

5

Mismatch in Vowel Count

14)

import java.util.\*;

public class ReverseString {

public static void main(String[] args) {

Scanner scanner = new Scanner(System.in);

// Take string input

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

String inputString = scanner.nextLine();

// Reverse the string manually

char[] charArray = inputString.toCharArray();

String reversedString = "";

for (int i = charArray.length - 1; i >= 0; i--) {

reversedString += charArray[i];

}

// Print the reversed string

System.out.println("Reversed String: " + reversedString);

scanner.close();

}

}

Enter a string:

abc

Reversed String: cba

15)

package Day3;

import java.util.\*;

public class SortString {

    public static void main(String[] args) {

        Scanner scanner = new Scanner(System.in);

        // Take string input

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

        String inputString = scanner.nextLine();

        // Convert the string to a character array

        char[] charArray = inputString.toCharArray();

        // Sort the character array

        Arrays.sort(charArray);

        // Convert the sorted character array back to a string

        String sortedString = new String(charArray);

        // Print the sorted string

        System.out.println("Sorted String: " + sortedString);

        scanner.close();

    }

}

Enter a string:

suhail

Sorted String: ahilsu

16)

package Day3;

import java.util.\*;

public class SwapPairs {

    public static void main(String[] args) {

        Scanner scanner = new Scanner(System.in);

        // Take string input

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

        String inputString = scanner.nextLine();

        // Convert the string to a character array

        char[] charArray = inputString.toCharArray();

        // Swap pairs of characters

        for (int i = 0; i < charArray.length - 1; i += 2) {

            char temp = charArray[i];

            charArray[i] = charArray[i + 1];

            charArray[i + 1] = temp;

        }

        // Convert the modified character array back to a string

        String swappedString = new String(charArray);

        // Print the swapped string

        System.out.println("Swapped String: " + swappedString);

        scanner.close();

    }

}

Enter a string:

java

Swapped String: ajav

Enter a string:

testing

Swapped String: ettsnig

17)

package Day3;

import java.util.\*;

public class PangramCheck {

    public static void main(String[] args) {

        Scanner scanner = new Scanner(System.in);

        // Take string input

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

        String inputString = scanner.nextLine();

        // Convert the string to lowercase for case insensitivity

        String lowerCaseString = inputString.toLowerCase();

        // Create a boolean array to track the presence of each alphabet

        boolean[] alphabetPresent = new boolean[26];

        int count = 0;

        // Check for each character in the string

        for (char ch : lowerCaseString.toCharArray()) {

            if (ch >= 'a' && ch <= 'z') {

                int index = ch - 'a';

                if (!alphabetPresent[index]) {

                    alphabetPresent[index] = true;

                    count++;

                }

            }

        }

        // Check if all alphabets are present

        if (count == 26) {

            System.out.println("Yes");

        } else {

            System.out.println("No");

        }

        scanner.close();

    }

}

Enter a string:

abcdefghijklmnopqrstuvwxyz

Yes

Enter a string:

okle

No

18)

import java.util.\*;

public class FirstLetterExtractor {

public static void main(String[] args) {

Scanner scanner = new Scanner(System.in);

// Take string input

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

String inputString = scanner.nextLine();

// Split the string into words

String[] words = inputString.split(" ");

// Extract the first letter of each word

StringBuilder result = new StringBuilder();

for (String word : words) {

if (!word.isEmpty()) {

result.append(word.charAt(0));

}

}

// Print the result

System.out.println("Output: " + result.toString().toUpperCase());

scanner.close();

}

}

Enter a string:

Java programming

Output: JP

Enter a string:

united kingdom

Output: UK

19)

import java.util.\*;

public class StringInserter {

public static void main(String[] args) {

Scanner scanner = new Scanner(System.in);

// Take inputs

System.out.println("Enter the original string:");

String originalString = scanner.nextLine();

System.out.println("Enter the string to be inserted:");

String stringToBeInserted = scanner.nextLine();

System.out.println("Enter the index where the string should be inserted:");

int index = scanner.nextInt();

// Validate index

if (index < 0 || index > originalString.length()) {

System.out.println("Invalid index.");

} else {

// Insert the string

String result = originalString.substring(0, index) + stringToBeInserted + originalString.substring(index);

System.out.println("Output: " + result);

}

scanner.close();

}

}

Enter the original string:

computer portal

Enter the string to be inserted:

science

Enter the index where the string should be inserted:

8

Output: computerscience portal

20)

import java.util.\*;

public class EvenLengthWords {

public static void main(String[] args) {

Scanner scanner = new Scanner(System.in);

// Take input string

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

String inputString = scanner.nextLine();

// Split the string into words

String[] words = inputString.split(" ");

// Print words with even length

System.out.println("Even length words:");

for (String word : words) {

if (word.length() % 2 == 0) {

System.out.println(word);

}

}

scanner.close();

}

}

Enter a string:

this is a java language

Even length words:

this

is

java

language

Enter a string:

i am a tester

Even length words:

am

tester