

1.program to count words for frequencies in agiven text.

```
import java.util.HashMap;
import java.util.Scanner;
public class WordFrequencyCounter {
    public static void main(String[] args) {
        // Initialize variables
        Scanner scanner = new Scanner(System.in);
        HashMap<String, Integer> wordCounts = new HashMap<>();
        // Get the text from the user
        System.out.println("Enter your text:");
        String text = scanner.nextLine();
        // Split the text into words and count their frequencies
        String[] words = text.toLowerCase().split("\\W+"); // Split by non-word characters
        for (String word : words) {
            if (wordCounts.containsKey(word)) {
                wordCounts.put(word, wordCounts.get(word) + 1);
            } else {
                wordCounts.put(word, 1);
            }
        }
        // Print the word frequencies
        System.out.println("\nWord Frequencies:");
        for (String word : wordCounts.keySet()) {
            System.out.printf("%s: %d\n", word, wordCounts.get(word));
        }
    }
}
```

2.palindrome checker

```
public class PalindromeCheck {
    public static boolean

isPalindrome(String word)

{
    StringBuilder sb = new StringBuilder(word);
    sb.reverse();
    return word.equalsIgnoreCase(sb.toString());
}
public static void main(String[] args) {
    String word1 = "madam";
    String word2 = "racecar";
    String word3 = "banana";
    System.out.println(word1 + " is palindrome: " + isPalindrome(word1));
    System.out.println(word2 + " is palindrome: " + isPalindrome(word2));
}
```

```
        System.out.println(word3 + " is palindrome: " + isPalindrome(word3));
    }
}
```

3.list manipulation

```
import java.util.ArrayList;
import java.util.List;
public class PrintSquares {
    public static void main(String[] args) {
        List<Integer> numbers = new ArrayList<Integer>();
        numbers.add(2);
        numbers.add(5);
        numbers.add(7);
        numbers.add(10);
        System.out.println("Squares of the numbers:");
        for (int number : numbers) {
            System.out.println(number + " ^ 2 = " + Math.pow(number, 2));
        }
        numbers.forEach(number -> System.out.println(number + " ^ 2 = " + Math.pow(number, 2)));
    }
}
```