1.REVERSE AN ARRAY

import java.util.Arrays;

public class ReverseArray {

public static void main(String[] args) {

int[] arr = {1, 2, 3, 4, 5};

int start = 0, end = arr.length - 1;

while (start < end) {

int temp = arr[start];

arr[start] = arr[end];

arr[end] = temp;

start++;

end--;

}

System.out.println("Reversed Array: " + Arrays.toString(arr));

}

}

2. **Find Largest and Smallest in Array**

public class MinMaxArray {

public static void main(String[] args) {

int[] arr = {12, 5, 8, 20, 3};

int min = arr[0], max = arr[0];

for (int num : arr) {

if (num < min) min = num;

if (num > max) max = num;

}

System.out.println("Min: " + min);

System.out.println("Max: " + max);

}

}

**3. Check if a String is Palindrome**

public class PalindromeCheck {

public static void main(String[] args) {

String str = "madam";

String reversed = "";

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

reversed += str.charAt(i);

}

if (str.equals(reversed))

System.out.println("Palindrome");

else

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

}

}

**4. Count Vowels and Consonants in a String**

public class VowelConsonantCount {

public static void main(String[] args) {

String str = "Hello World";

str = str.toLowerCase();

int vowels = 0, consonants = 0;

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

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

if ("aeiou".indexOf(ch) != -1) vowels++;

else consonants++;

}

}

System.out.println("Vowels: " + vowels);

System.out.println("Consonants: " + consonants);

}

}

5. Find Duplicate Elements in an Array

public class DuplicateElements {

public static void main(String[] args) {

int[] arr = {2, 4, 5, 2, 3, 4, 6};

System.out.print("Duplicates: ");

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

for (int j = i + 1; j < arr.length; j++) {

if (arr[i] == arr[j]) {

System.out.print(arr[i] + " ");

break;

}

}

}

}

}