public class RotatedArraySearch {

public static int search(int[] arr, int target) {

int left = 0, right = arr.length - 1;

while (left <= right) {

int mid = left + (right - left) / 2;

if (arr[mid] == target) {

return mid;

if (arr[left] <= arr[mid]) {

if (arr[left] <= target && target < arr[mid]) {

right = mid - 1;

} else {

left = mid + 1;

}

}

if (arr[mid] < target && target <= arr[right]) {

left = mid + 1;

} else {

right = mid - 1;

}

}

}

}

public static void main(String[] args) {

int[] arr = {104, 105, 106, 107, 101, 102, 103};

int target = 102;

int result = search(arr, target);

if (result != -1) {

System.out.println("Product ID " + target + " found at index: " + result);

} else {

System.out.println("Product ID " + target + " not found.");

}

}

}