

CASH REGISTER VERIFICATION:

1. In a retail store, the cash register system needs to quickly verify whether any two items in a customer's purchase can be combined to match a specific target amount (e.g., a coupon discount or a bundled offer). This helps in applying promotions efficiently.

Input

4

3 5 2 -4

8

Output

True

PROGRAM:

```
import java.util.Scanner;
public class PairSumSimple {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        int n = sc.nextInt();
        int[] prices = new int[n];
        for (int i = 0; i < n; i++) {
            prices[i] = sc.nextInt();
        }
        int target = sc.nextInt();
        boolean found = false;
        for (int i = 0; i < n; i++) {
            for (int j = i + 1; j < n; j++) {
                if (prices[i] + prices[j] == target) {
                    found = true;
                    break;
                }
            }
            if (found) break;
        }
        System.out.println(found);
    }
}
```

STUDENT ID VERIFICATION:

2. In a classroom management system, a teacher needs to verify whether any student ID appears more than once in the attendance list. This helps prevent errors like duplicate registrations or data entry mistakes.

Example

Input

5

3 5 7 3 9

Output

True.

Input

4

10 20 30 40

Output

False.

PROGRAM:

```
import java.util.Scanner;
public class DuplicateChecker {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        int n = sc.nextInt();
        int[] ids = new int[n];
        for (int i = 0; i < n; i++) {
            ids[i] = sc.nextInt();
        }
        boolean hasDuplicates = false;
        for (int i = 0; i < n; i++) {
            for (int j = i + 1; j < n; j++) {
                if (ids[i] == ids[j]) {
                    hasDuplicates = true;
                    break;
                }
            }
            if (hasDuplicates) break;
        }
        System.out.println(hasDuplicates);
    }
}
```