Check Subset ★

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You are given two sets, A and B.

Your job is to find whether set A is a subset of set B.

If set A is subset of set B, print **True**.

If set A is not a subset of set B, print **False**.

Input Format

The first line will contain the number of test cases, T.

The first line of each test case contains the number of elements in set A.

The second line of each test case contains the space separated elements of set A.

The third line of each test case contains the number of elements in set B.

The fourth line of each test case contains the space separated elements of set B.

Constraints

- $0 < T < 21$
- $0 < \text{Number of elements in each set} < 1001$

Output Format

Output **True** or **False** for each test case on separate lines.

Sample Input

```
3
5
1 2 3 5 6
9
9 8 5 6 3 2 1 4 7
1
2
5
3 6 5 4 1
7
1 2 3 5 6 8 9
3
9 8 2
```

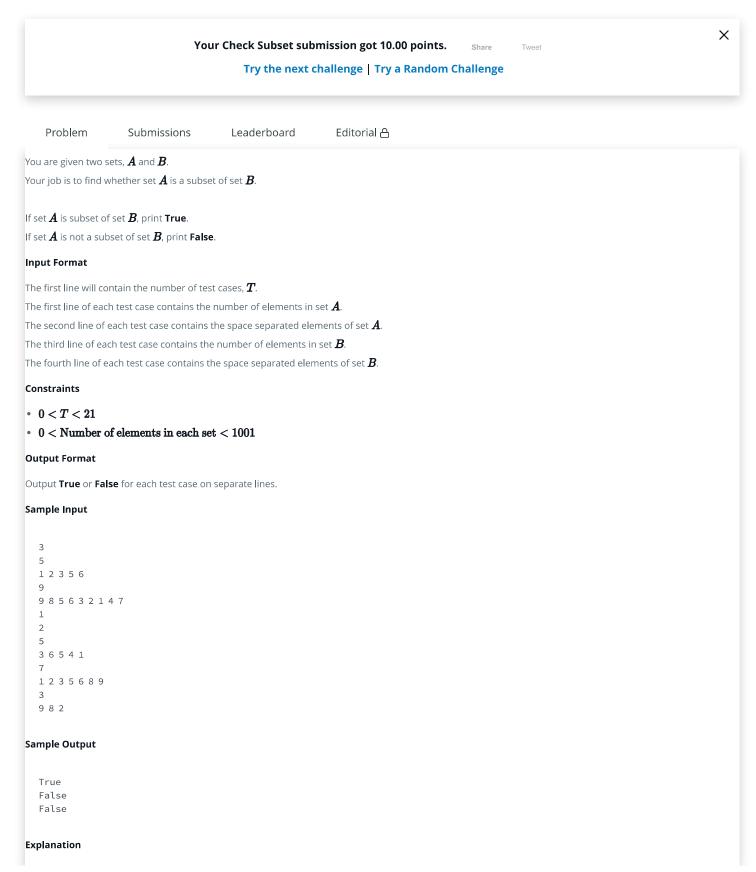**Sample Output**
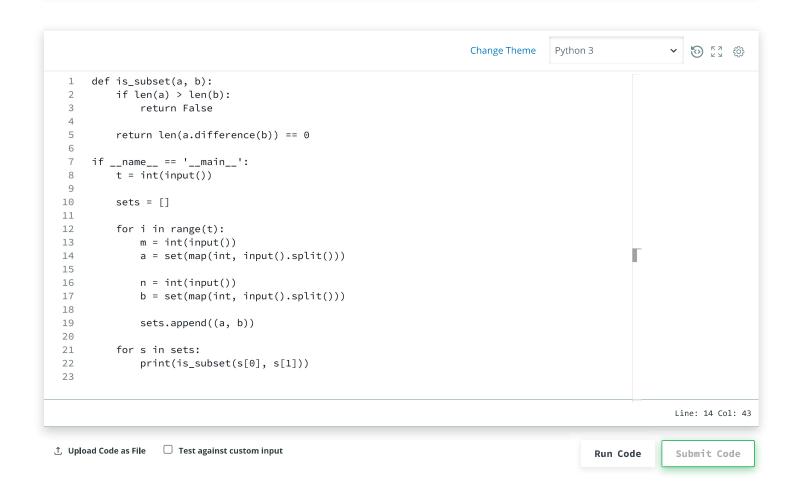
```
True
False
False
```

Explanation

Test Case 01 Explanation

Set A = {1 2 3 5 6}

Set B = {9 8 5 6 3 2 1 4 7}

All the elements of set A are elements of set B.
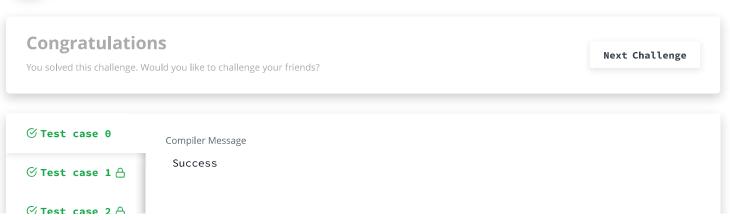
Hence, set A is a subset of set B.

Change Theme   Python 3

```python
def is_subset(a, b):
    if len(a) > len(b):
        return False

    return len(a.difference(b)) == 0

if __name__ == '__main__':
    t = int(input())

    sets = []

    for i in range(t):
        m = int(input())
        a = set(map(int, input().split()))

        n = int(input())
        b = set(map(int, input().split()))

        sets.append((a, b))

    for s in sets:
        print(is_subset(s[0], s[1]))
```

Line: 14 Col: 43

⬆ Upload Code as File   ☐ Test against custom input

Run Code   Submit Code

You have earned 10.00 points!

39/115 challenges solved.

34%

Congratulations

You solved this challenge. Would you like to challenge your friends?

Next Challenge

✅ **Test case 0**

✅ **Test case 1** 🔒

✅ **Test case 2** 🔒

Compiler Message

Success

⊘ Test case 2 🔒

⊘ **Test case 3** 🔒

⊘ **Test case 4** 🔒

⊘ **Test case 5** 🔒

Input (stdin)   Download

```
1    3
2    5
3    1 2 3 5 6
4    9
5    9 8 5 6 3 2 1 4 7
6    1
7    2
8    5
```