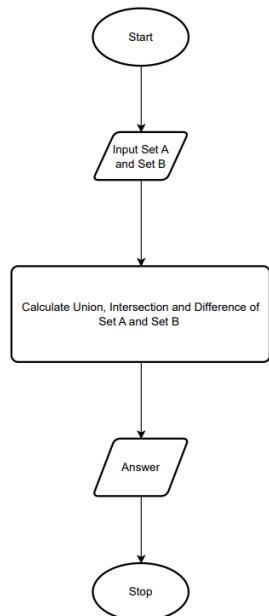


4.1.1 Set Operations

Algorithm:

1. Start the program.
2. Read the space-separated integers for Set A and store them as a set.
3. Read the space-separated integers for Set B and store them as a set.
4. Find the union of Set A and Set B.
5. Find the intersection of Set A and Set B.
6. Find the difference of Set A and Set B and print all results.
7. Stop



12:34 AA ⚡ ↻

soumya.saraf.batch2025@sitnagpur.siu.edu.in Support Logout

4.1.1. Set Operations

Write a Python program to perform union, intersection and difference operations on *Set A* and *Set B*.

Input Format:

- First Line prompts "Set A: " followed by space-separated list of integers for *Set A*.
- The second input prompts "Set B: " followed by space-separated list of integers for *Set B*.

Output Format:

- The first line prints "Union: " followed by the union of *Set A* and *Set B*.
- The second line prints "Intersection: " followed by the intersection of *Set A* and *Set B*.
- The third line prints "Difference: " followed by the difference of *Set A* and *Set B*.

Note:

- If there is no intersection between the two sets, the program prints an empty set, which appears as "set()" in the output.

Sample Test Cases +

setoperat...

```
1 set_a = set(map(int, input("Set A: ").split()))
2 set_b = set(map(int, input("Set B: ").split()))
3
4 union_set = set_a.union(set_b)
5 intersection_set = set_a.intersection(set_b)
6 difference_set = set_a.difference(set_b)
7
8
9
10 print("Union:", union_set)
11 print("Intersection:", intersection_set)
12 print("Difference:", difference_set)
```

Average time: 0.011 s Maximum time: 0.019 s
11.25 ms 19.00 ms

2 out of 2 shown test case(s) passed
2 out of 2 hidden test case(s) passed

Test case 1 19 ms
Test case 2 6 ms

Terminal Test cases

< Prev Reset Submit Next >