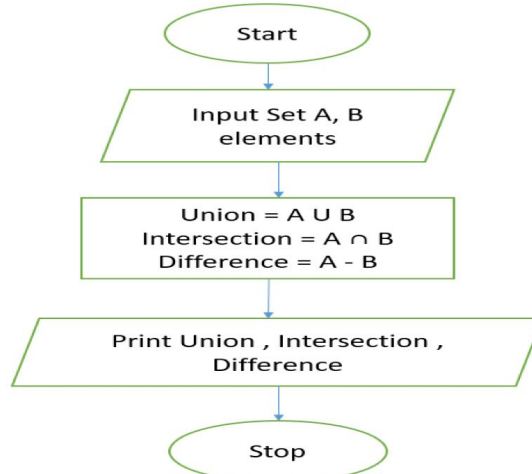


PROBLEM 4.1.1

Flowchart



Algorithm

Start

Read space-separated integers for **Set A**.

Read space-separated integers for **Set B**.

Convert the inputs into two sets: Set A and Set B.

Find the **Union**, Intersection and Difference of Set A and Set B.

Display the **Union**, Intersection and Difference.

Stop

The screenshot displays the CODETANTRA online IDE interface. On the left, the problem description for '4.1.1. Set Operations' is visible, including input/output formats and a note. The main editor shows a Python script that reads two sets of integers, calculates their union, intersection, and difference, and prints the results. The output window shows the execution results for the input 'Set A: 1 2 3 4' and 'Set B: 5', resulting in 'Union: {1, 2, 3, 4, 5}', 'Intersection: set()', and 'Difference: {1, 2, 3, 4}'. The status bar at the bottom indicates 'YOUR PROGRAM HAS ENDED'.

```
1 input_a = input("Set A: ")
2 set_a = set(map(int, input_a.split()))
3 input_b = input("Set B: ")
4 set_b = set(map(int, input_b.split()))
5 union_result = set_a.union(set_b)
6 intersection_result = set_a.intersection(set_b)
7 difference_result = set_a.difference(set_b)
8 print(f"Union: {union_result}")
9 print(f"Intersection: {intersection_result}")
10 print(f"Difference: {difference_result}")
```

Set A: 1 2 3 4
Set B: 5
Union: {1, 2, 3, 4, 5}
Intersection: set()
Difference: {1, 2, 3, 4}

YOUR PROGRAM HAS ENDED