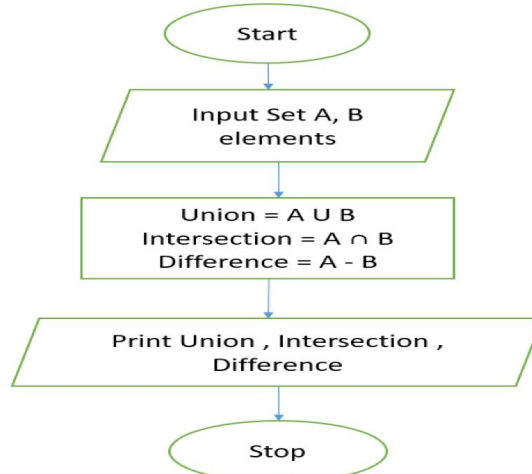


PROBLEM 4.1.1

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 a coding interface with a problem description on the left and a code editor on the right. The problem description, titled '4.1.1. Set Operations', asks for a Python program to perform union, intersection, and difference operations on two sets, A and B. It specifies the input format (two lines of space-separated integers) and the output format (three lines showing the Union, Intersection, and Difference). The code editor shows a Python solution that uses the `set` data type to calculate these operations. The output window shows the execution results for the input sets A = {1, 2, 3, 4} and B = {2, 3, 4, 5}, resulting in Union: {1, 2, 3, 4, 5}, Intersection: {2, 3, 4}, and Difference: {1}.

4.1.1. Set Operations 27/34

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:

```
1 set_a = set(map(int,input("Set A: ").split()))
2 set_b = set(map(int,input("Set B: ").split()))
3 union_set = set_a | set_b
4 intersection_set = set_a & set_b
5 difference_set = set_a - set_b
6 print("Union:", union_set)
7 print("Intersection:", intersection_set)
8 print("Difference:", difference_set)
```

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

==== YOUR PROGRAM HAS ENDED ====