

Experiment

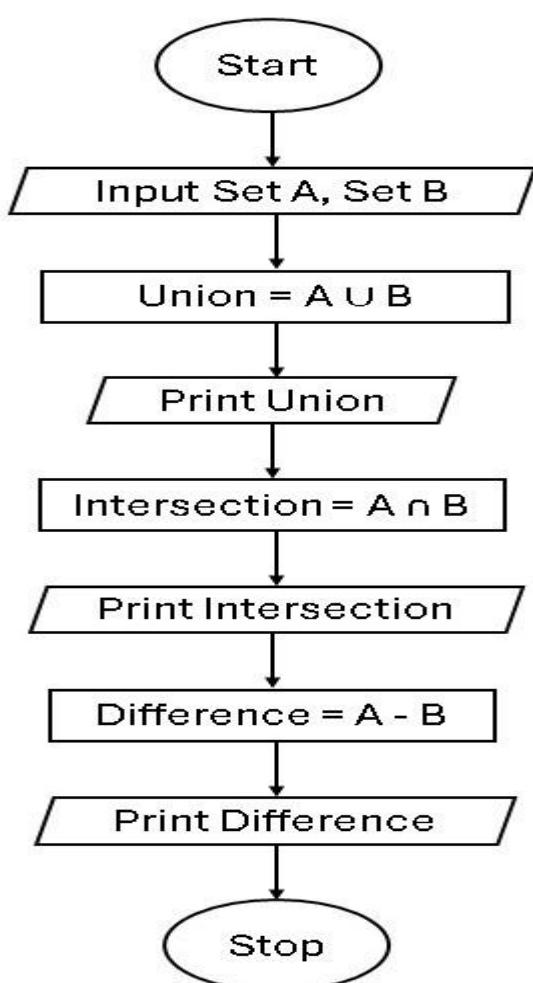
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4.1.1 Set Operations Algorithm

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- Step 1 : Start
 - Step 2 : Input Set A, Set B
 - Step 3 : Union = $A \cup B$
 - Step 4 : Print Union
 - Step 5 : Intersection = $A \cap B$
 - Step 6 : Print Intersection
 - Step 7 : Difference = $A - B$
 - Step 8 : Print Difference
 - Step 9 : Stop

Flowchart

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Code

```
set_a = set(map(int,input("Set A:\n").split()))
set_b = set(map(int,input("Set B:\n").split()))
union = set_a | set_b
Print("Union: ",union)
intersection = set_a & set_b
Print("Intersection: ",intersection)
difference= set_a - set_b
Print("Difference: ",difference)
```

Execution

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4.1.1. Set Operations

26/08 A C D E -

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.
- Please refer to the visible test cases for better understanding.

Sample Test Cases

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Test Case 1 7ms

Average time 0.008 s Maximum time 0.009 s 7.75 ms 9.00 ms 2 out of 2 hidden test case(s) passed

Test Case 1 7ms

Expected output

Set A: 0 2 4 5 8

Actual output

Set A: 0 2 4 5 8

Set B: 1 2 3 4 5

Set B: 1 2 3 4 5

Union: {0, 1, 2, 3, 4, 5, 8}

Union: {0, 1, 2, 3, 4, 5, 8}

Intersection: {2, 4, 5}

Intersection: {2, 4, 5}

Difference: {0, 8}

Difference: {0, 8}

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