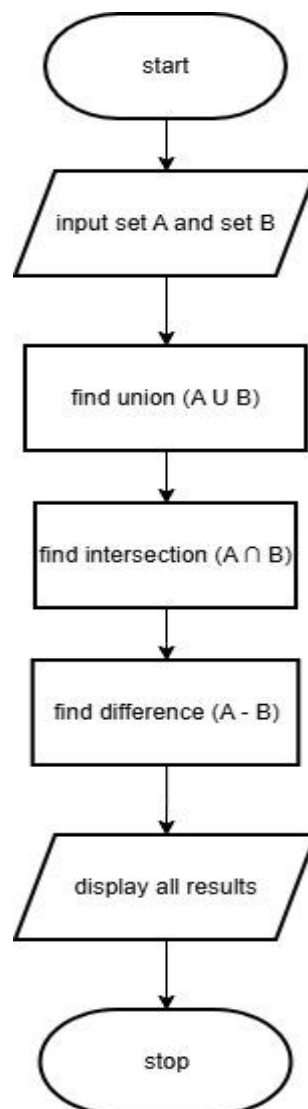


4.1.1 : Set Operations

Flow Chart :



Algorithm :

Step 1: Start

Step 2: Read elements of Set A

Step 3: Read elements of Set B

Step 4: Convert the inputs into sets

Step 5: Find Union of Set A and Set B

Step 6: Find Intersection of Set A and Set B

Step 7: Find Difference (Set A – Set B)

Step 8: Display Union

Step 9: Display Intersection

Step 10: Display Difference

Step 11: Stop

CODETANTRA

Home

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4.1.1. Set Operations11:53

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

setoperat...

```
1 # Type Content here...
2 seta=set(map(int,input("Set A: ").split()))
3 setb=set(map(int,input("Set B: ").split()))
4 u = seta | setb
5 i = seta & setb
6 d = seta - setb
7 print("Union:", u)
8 print("Intersection:", i)
9 print("Difference:", d)
```

Average time0.020 s20.25 ms

Maximum time0.036 s36.00 ms

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

Test case 136 ms

Debug

Expected output

Actual output

Set A: 0 2 4 5 8Set A: 0 2 4 5 8

Set B: 1 2 3 4 5Set 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}

Terminal

Test cases

< Prev

Reset

Submit

Next >