## **ASSIGNMENT QUESTION-3**

Form two numbers having min and max possible value with any given set of digits without repeating any digit.

E.g : given set of digits : 1, 3, 2, 7, 9, 4 Solution :

min possible value : 123479 max possible value : 974321

## Answer:-

## Algorithm:

• Sort the digits in ascending order to get the minimum value:

Arrange the digits in ascending order.

Form the minimum number using these digits.

• Sort the digits in descending order to get the maximum value:

Arrange the digits in descending order.

Form the maximum number using these digits.

## Example:

Let's take the set of digits: 5, 8, 2, 3, 7, 1

• Sort in ascending order for the minimum value:

Arrange in ascending order: 1, 2, 3, 5, 7, 8

Form the minimum number: 123578

• Sort in descending order for the maximum value:

Arrange in descending order: 8, 7, 5, 3, 2, 1

Form the maximum number: 875321

So, for the given set of digits (5, 8, 2, 3, 7, 1):

Minimum possible value: 123578

Maximum possible value: 875321