Program-13

Practice of Various set of operations.

Theory:-

The Cardinality of a set:The cardinality is the total numebr of unique element in a set.

Example: A=1,6,7,8,9

The cardinality of a set A is:n(A)=5

Set Union:- The union of set A and B(denoted by AUB) is the set of all elements of A and B and the common both A and B.

Set Intersection:- The intersection Of sets A and B (denoted by AnB) is the set of elements which are in both A and B.

Set Difference:- The difference between two sets A and B is written A-B and means the set that consists of the elements of A which are not elements of B.

Ex:-A={1,2,3,4,5,6,7,8}

B={6,7,8,}

A – B = {1,2,3,4,5}

Symmetric Difference:- If A and B are the two sets be defined there symmetric difference as the set belongs to A or the set to B but not both A and B.

Power Set:- Power set of a set is the set of all positive subset of 's' including the empty set. The cardinality of the power set is 2.

Power set is denoted by P(s) where n, is the no. of elements of the set 's' .

Ex:- s={a,b,c}

Power set,P(s)={{a},{b},{c},{a,b},{a,c},{b,c},{a,b,c},{}}