

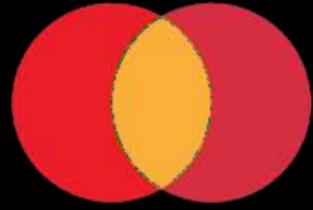
# DISCRETE STRUCTURES



**Topic**

**Venn Diagram**



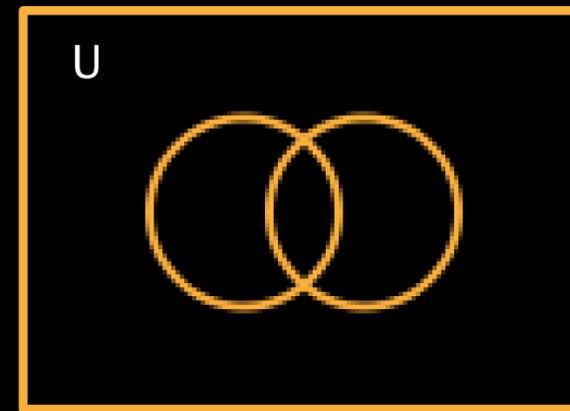


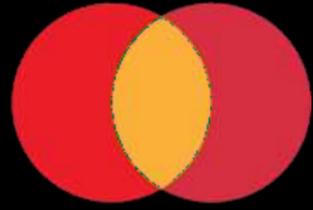
## **Venn Diagram:**

A Venn diagram is a pictorial visual representation of sets and their relationships.

### **Explanation of venn Diagram:**

**In venn Diagram , universal sets is represented by rectrangle shape and sets are represented by circle.**

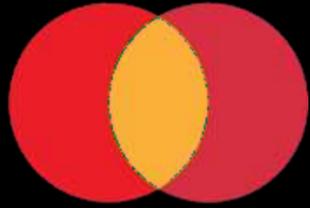




## **Relations between sets:**

There are three types of relations between any two sets:–

- Disjoint
- Overlapping
- Subsets

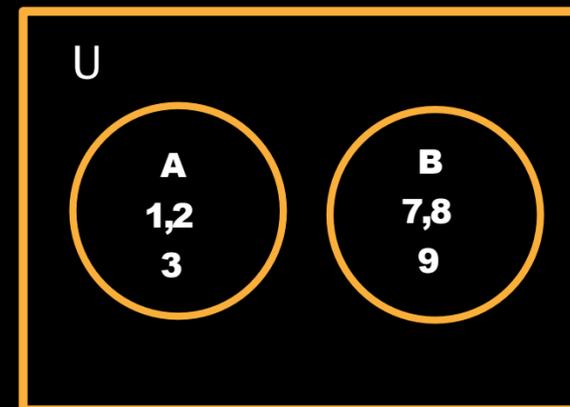


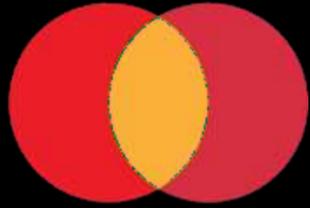
## Disjoint sets:

Two or more sets with no common elements.

**Example:**

**Set A={1,2,3} , Set B={7,8,9}**



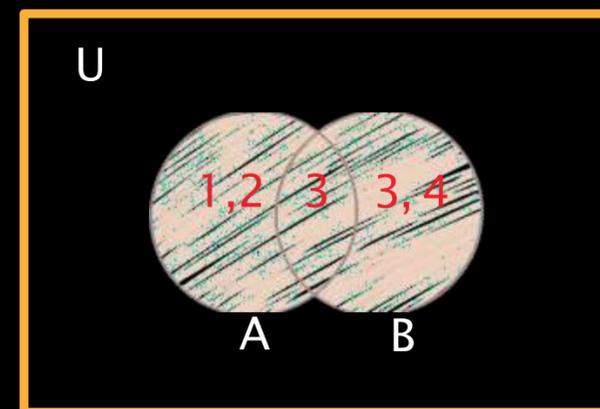


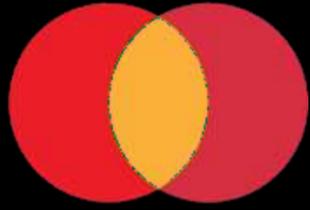
## Overlapping Sets:

Two or more sets with same common elements.

**Example:**

**Set A={1,2,3} , Set B={3,4}**





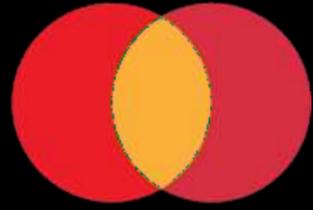
## Subsets:

A set contained within another set.

### Example:

**Set A={1,2,3,4} , Set B={2,3}**



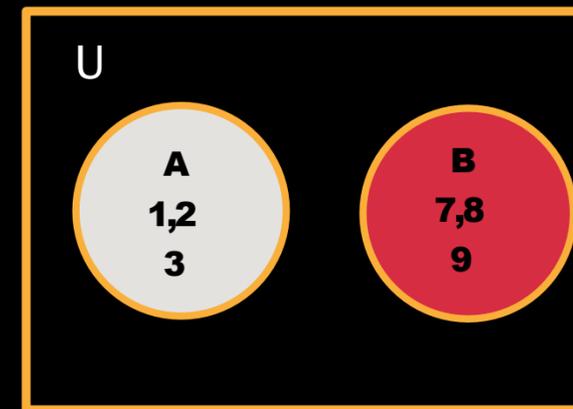


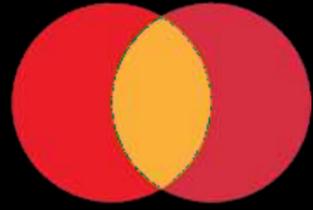
# Union:

Union Operation on sets using Venn Diagram.

**Example:**

**Set A={1,2,3} , Set B={7,8,9}**



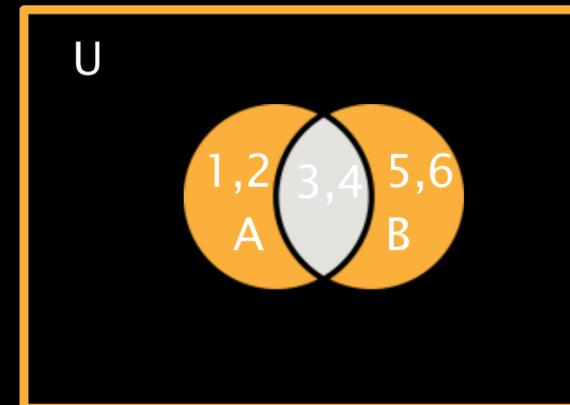


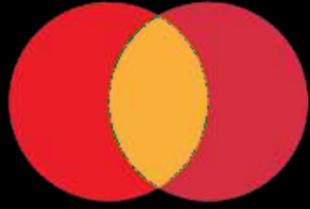
## Intersection:

Intersection operation on sets using venn daigram:

**Example:**

**Set A={1,2,3,4} , Set B={3,4,5,6}**



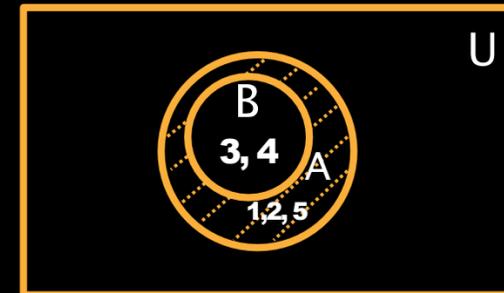


## Difference:

Difference Operation on sets using venn Daigram:

**Example:**

**Set A={1,2,3,4,5}, SetB={3,4}**



THANK YOU