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Difference b/w Array & structure:-

ARRAY

- (i) Array is a collection of homogeneous data.
- (ii) Array data are accessed using index.
- (iii) Array allocates static memory.
- (iv) Array element access takes less time than structure.

STRUCTURE

- (i) Structure is a collection of heterogeneous data.
- (ii) Structure elements are accessed using operator.
- (iii) Structure allocates dynamic memory.
- (iv) Structure elements take more time than array.

STRUCTURE

→ structure in C refers to a collection of various data types for ex. you create a structure named student which contains his name, roll no, dob etc

POINTERS

→ pointers refer to addresses in C. & symbol is used to point some particular place in C memory.

STRUCTURE

1. For defining structure use struct keyword.

ex:- struct student

```
{  
    int roll-no;  
    char name[50];  
    float per;  
};
```

UNION

1. for defining union we use union keyword.

ex:- ~~struct~~ union student

```
{  
    int roll-no;  
    char name[50];  
    float per;  
};
```

1. Structure occupies more memory space than ~~unions~~ union.

In above ex:-

$$2 + 50 + 4 = 56 \text{ bytes.}$$

3. In structure we can access all members of structure at a time.

4. Structure allocates separate storage space for its every member.

2. Union occupies less memory space than structure.

50 bytes (max. data member's size).

3. In union we can access only one member of union at a time.

4. Union allocates one common storage space for its all members. Union find which member need more memory than other member. then it allocates that much space.