Array

What is an Array?

An <u>array</u> is the simplest data structure where a collection of similar data elements takes place and each data element can be accessed directly by only using its index number.

Array Advantages

- Random access
- Easy sorting and iteration
- Replacement of multiple variables

Array Disadvantages

- Size is fixed
- Difficult to insert and delete
- If capacity is more and occupancy less, most of the array gets wasted
- Needs contiguous memory to get allocated

Array Applications

- For storing information in a linear fashion
- Suitable for applications that require frequent searching

Java Program using Array

```java
import java.util.Scanner;

public class Main{
    public  static void main(String args[]){
        int[] petels=new int[5];
        Scanner sc=new Scanner(System.in);
```

```java
        for(int i=0;i<petels.length;i++){
            petels[i]=sc.nextInt();
        }
        for (int i=0;i< petels.length;i++){
            System.out.print(petels[i]+"");
        }
    }

}
```