



# SNS COLLEGE OF ENGINEERING



Kurumbapalayam(Po), Coimbatore - 641 107

Accredited by NAAC-UGC with 'A' Grade

Approved by AICTE, Recognized by UGC & Affiliated to Anna University, Chennai

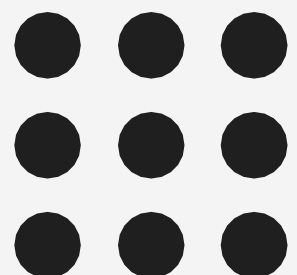
## Department of Information Technology

### 19CS204 OBJECT ORIENTED PROGRAMMING

I YEAR /II SEMESTER

Unit 2- BASIC FEATURES OF JAVA

SuperKeyword/Static Array





## Super Keyword in Java

- The **super** keyword in Java is a reference variable which is used to **refer immediate parent class object**.
- Whenever you create the instance of subclass, an instance of parent class is created implicitly which is referred by super reference variable.



## Usage of Java super Keyword

1. super can be used to **refer immediate parent class** instance variable.
2. super can be used to invoke **immediate parent class method**.
3. super() can be used to invoke **immediate parent class constructor**.



```
class Animal {
    String name;
    void sound()
{
    System.out.println("Animal makes a sound.");
}
}

class Dog extends Animal
{
    void sound()
{
        super.sound(); // Invoke the sound()
    }
}
```

```
method of the superclass
        System.out.println("Dog barks.");
    }
}

public class Main {
    public static void main(String[] args) {
        Dog dog = new Dog();
        dog.sound();
    }
}
```





```
class TestSuper3
{
public static void main(String args[])
{
Dog d=new Dog();
}
}
```



## Static Array

- In Java, array is the most important data structure that contains elements of the same type. It stores elements in contiguous memory allocation.
- There are two types of array i.e. **static array** and **dynamic array**. In this section, we will focus only on **static array in Java**.

## Static Array

- An array that is declared with the static keyword is known as static array. It allocates memory at compile-time whose size is fixed. We cannot alter the static array.
- If we want an array to be sized based on input from the user, then we cannot use static arrays. In such a case, dynamic arrays allow us to specify the size of an array at run-time.



## Static Array Example

For example, `int arr[10]` creates an array of size 10. It means we can insert only 10 elements; we cannot add a 11th element as the size of Array is fixed.

### Example

```
int arr[] = { 1, 3, 4 }; // static integer array
```

```
int* arr = new int[3]; // dynamic integer array
```

### Declaring a Static Array

**The syntax to declare a static array is:**

```
<data type> <variable name> []={<data1>,<data2>,...<dataN>};
```



```
public class StaticArrayExample  
  
{  
  
private static String[] array;  
  
static  
  
{  
  
array = new String[2];  
  
array[0] = "Welcome to";  
  
array[1] = "Javatpoint";  
  
}
```





```
public static void main(String args[])
{
for(int i = 0; i < array.length; i++)
{
System.out.print(array[i] + " ");
}
}
}
```



**THANK YOU**