



SNS COLLEGE OF ENGINEERING



Kurumbapalayam(Po), Coimbatore - 641 107

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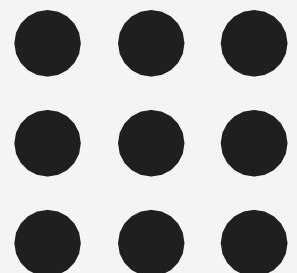
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Department of CSE(IOT AND CYBERSECURITY INCLUDING BCT) 19CS206 OBJECT ORIENTED PROGRAMMING

I YEAR /II SEMESTER

Unit 2- **BASICS FEATURES OF JAVA**

Topic 1: **Class and methods in java**





Class and methods in java

- A class is a group of objects which have common properties.
- It is a template or blueprint from which objects are created. It is a logical entity. It can't be physical.
- A class in Java can contain:
 - **Fields**
 - **Methods**
 - **Constructors**
 - **Blocks**
 - **Nested class and interface**



Declaration of Class:

- A class is declared by use of the class keyword.
- The class body is enclosed between curly braces { and }.
- The data or variables, defined within a class are called instance variables.
- The code is contained within methods. Collectively, the methods and variables defined within a class are called members of the class.



Syntax to declare a class:

```
class <class_name>  
  
{  
  
    field;  
  
    method;  
  
}
```



Instance variable in Java

- A variable which is created inside the class but outside the method is known as an instance variable.
- Instance variable doesn't get memory at compile time.
- It gets memory at runtime when an object or instance is created. That is why it is known as an instance variable.

Java Methods

- A **method** is a block of code which only runs when it is called.
- You can pass data, known as parameters, into a method.
- Methods are used to perform certain actions, and they are also known as **functions**.



Create a Method

- A method must be declared within a class.
- It is defined with the name of the method, followed by parentheses ().
- Java provides some pre-defined methods, such as System.out.println(), but you can also create your own methods to perform certain actions:

Create a method inside Main:

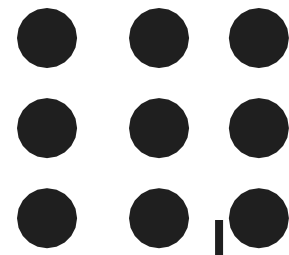
```
public class Main
{
    static void myMethod() {
        // code to be executed
    }
}
```



Call a Method

- To call a method in Java, write the method's name followed by two parentheses () and a semicolon;
- In the following example, `myMethod()` is used to print a text (the action), when it is called:

```
public class Main {  
    static void myMethod() {  
        System.out.println("I just got executed!");  
    }  
    public static void main(String[] args) {  
        myMethod();  
    }  
}
```





THANK YOU