**METHODS IN JAVA**

* A method in java is a block of code that, when called, performs specific actions mentioned in it.
* The primary uses of methods in java are:
* It allows code reusability (define once and use multiple times)
* You can break a complex program into smaller chunks of code
* It increases code readability
* The most Important methods in java is the main() method.
* **Method Declaration:**
* The general form of a method declaration is:

Access Modiffer RetrunType methodname (parameter-list)

{

Method-body;

}

* Method declarations have four basic parts:
* The name of the method (methodname)
* The type of the value the method returns (type)
* A list of parameters (parameter-list)
* The body of the method
* The type specifies the type of value the method would return.
* This could be a simple data type such as int as well as any class type. It could even be void type, if the method does not return any value.
* The methodname is a valid identifier.
* The parameter list is always enclosed in parentheses. The list contains variable names and types of all the values we want to give to the method as input. The variables in the list are separated by commas. In the case where no input data are required, the declaration must retain the empty parentheses.
* **Naming a method:**
* Standard Java Naming conventions

1. Packages: Names should be in lowercase.
2. Classes: Names should be in camelCase.
3. Interfaces: Names should be in camelCase.
4. Methods: Names should be in mixed case.
5. Variables: Names should be in mixed case.

* **Types Of Method:**
* Predefined Method
* User-defined Method
* Predefined Method:
* As the name gives it, predefined methods in java are the ones that the java class libraries already define.
* We can directly use these methods just by calling them in the program at any point.
* Each and every predefined method is defined inside a class.
* There are numerous predefined methods, such as length(), sqrt(), max() and print().
* Eg:

Public class Example{

//using the main method

Public static void main(String[] args) {

//using the print and sqrt methods

System.out.println(“the square root is: “ + math.sqrt(25));

* Output:

The square root is: 5.0

* User-defined Method:
* These methods are created by the programmers for their requirement as per the programming scenario.
* Custom methods defined by the user are known as user-defined methods.

* Eg:

Public class Addition{

Public static void main(String[] args) {

Int a= 5;

Int b= 20;

Int add= a+b;

displayResult(add);

}

Public static void displayResult(int result)

{

System.out.println(“result”);

}

}