

History of Java :

Name of the Language : Java
First Name of Java : OAK (Tree Name)
Developed by : James Gosling and his friends
Project Name : Green Project
Released Date : 23rd January 1996 (JDK 1.0)
Java : Name of the island in Indonesia
Official Symbol : Coffee Cup
Purpose : To create a common Remote Control

1985 - 89

Student Hosted Room

Students were doing the project under James Gosling

EA1
RC1

EA2
RC2

EA3
RC3

EA4
RC4

Can we create a common remote Control ?

EA1
EA2
EA3
EA4

CMC

C and C++ languages were platform dependent as James Gosling wanted some improvements to achieve platform independency.

James Gosling Office

Common Remote Control : *7 (Star 7 common Remote Control)

OAK 1991

Lab for Registration

Rename of OAK :
Java is an island where Coffee beans are prepared.
Java
Coffee CLIP

What is a function ?

() -> Symbol of a function

{ }

Predefined function

{ }

User defined function

* A function is a **well defined block** which is mainly used for printing the data, any type of calculation, returning some value and so on.

* Functions are divided into two types :

1) Predefined OR Built-in Function

2) Userdefined OR Custom Function

Predefined Function :

* If the body of the function is defined by language creator and provided to library OR API (Application Programming Interface) for use of programming is called Predefined function.
Example : printf(), scanf() and so on.

Userdefined Function :

* If the body of the function is defined by the user for own requirement and specification then it is called userdefined function.
Example : main(), add() and so on.

Note : main() is a userdefined function only the name is predefined because the execution of the program always starts from main function.

Advantages of Function :

1) Modularity :

* Dividing the bigger task into number of smaller tasks so, each module will perform independent task.

2) Easy understanding :

* Once the bigger task is divided into number of modules then it is very easy to understand the whole program.

3) Reusability :

* We can reuse a particular module "n" number of times based on the requirement.
[? In java we always reuse classes but not function]

4) Easy debugging :

* We can debug the program easily because the entire program is divided into individual modules.

Why we pass parameter to a function ?

* We should pass parameter to a function **for getting more information** regarding the function, without proper parameter, information is partial.

Example :

```
public void dedum(int x, int y)
{
}

public void deposit(double amount)
{
}
```

Why functions are called "Method" in java :

* In some languages like C++ and Python, We can write a member function "inside the class" as well as outside of the class.

```
//Can write a function outside the class (:-) //function
class FunctionDemo
{
    //Can write a function inside the class //Method
}
```

* In java, We can write a function inside the class only that is the reason member functions are called Method in java.

Example of Java class :

```
public class Demo
{
    // All the functions must be written inside the class only
}
```

Note : In java, We don't have nested method concept that means in java we cannot define a method inside another method.