

Code  Random
(OPC) PVT. LTD.

FUNCTIONS

OR

METHODS

Introduction To Functions/Methods

- A function is a piece of code used to do a particular task.
- It is a group of executable statements referenced by a specific name.
- Methods are used to perform certain actions that's why they are known as functions.

WHY FUNCTIONS ??

- To reuse portions of code.
- Flexibility- Programs that easily be modified.
- To allow us to cope with complex problems.

Functions / Method Definition

- The general form of a function/method definition is as given below:

```
[access specifier] [modifier] return-type function-name (parameter list)
{
    body of the function
}
```

where

Access specifier :- **public**, **private** or **protected**

Modifier :- **Final**, **Static**, **Native**, **Synchronised**, **Volatile**

Return-type :- specifies the type of value that the function starts. Ex:-
void,int

The parameter list is a comma-separated list of variables of a function referred to as its arguments or parameters.

Some Examples

```
public static void add ( int a, int b) {  
    int sum = a+b;  
    System.out.print(sum);  
}
```

```
int maximum ( int a, int b) {  
    if (a > b)  
        return a;  
    else  
        return b;  
}
```

Using Multiple Functions

```
class test
{
    int maths, sci, eng, sum;
    void sum( )
    {
        Scanner sc = new Scanner ( System.in);
        maths = sc.nextInt( );
        sci = sc.nextInt( );
        eng = sc.nextInt();
        sum = maths + sci + eng;
        System.out.println(sum);
    }
    void main()
    {
        sum(); //First Student Marks
        sum(); //Second Student marks
        sum(); // Third Student
        -----
        -----
        sum(); //Nth Student
```

Using Only Single Function

```
class test {
    int maths, sci, eng, sum;
    void main( ) {
        Scanner sc = new Scanner(System.in);
        maths = sc.nextInt( );
        sci = sc.nextInt( );
        eng = sc.nextInt();
        sum = maths + sci + eng;
        System.out.println(sum);

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