**METHODS**

In Java, a method is like a function which is used to expose the behavior of an object.

Java methods are an assortment of statements clustered together for performing an operation.

Method can be declared using void(return type) or a data type.

When we declare a method using void, there is no need of return statement.

Incase of declaring using datatype we should specify with a return statement.

**Example**:

**package** Task;

**public** **class** MethodEx {

**void** add(**int** a, **int** b) {

**int** c=a+b;

System.***out***.println(c);

}

**int** sub() {

**int** x=10;

System.***out***.println(x);

**return** x;

}

**public** **static** **void** main(String[] args) {

MethodEx m=**new** MethodEx();

m.sub();

m.add(2,12);

}

}

**STATIC METHOD:**

A method declared with static keyword is called as static method.

To call a static method there is no need of an object.

**EXAMPLE**

**package** Task;

**public** **class** staticEX {

**static** **void** add() {

System.***out***.println("im static method");

}

**public** **static** **void** main(String[] args) {

*add*();

}

}

**NON STATIC METHOD:**

A method without static keyword is called static method.

We need object to call this method.

EXAMPLE:

**package** Task;

**public** **class** staticEX {

**void** add() {

System.***out***.println("im static method");

}

**public** **static** **void** main(String[] args) {

staticEx s=new staticEx();

*s.add*();

}

}

**Example program for a method withoutparameters and without return type**

**public** **static** **void** main(String[] args)

{

*sum*();

}

**public** **static** **void** sum()

{

**int** num1=10;

**int** num2=20;

**int** res=num1+num2;

System.*out*.println(res);

}

}

**Program2:example program for a method withoutparameters and with return type**

**public** **class** program2 {

**public** **static** **void** main(String[] args)

{

**int** x=*sum*();

System.*out*.println(x);

}

**public** **static** **int** sum()

{

**int** num1=10;

**int** num2=20;

**int** res=num1+num2;

**return** res;

}

}

**Program3:example program for a method with two parameters and with return type**

**public** **class** program3 {

**public** **static** **void** main(String[] args)

{

**double** x=*sum*(25.55,20.37);

double y=sum(32.15,34.55);

System.*out*.println(x);

System.*out*.println(y);

}

**public** **static** **double** sum(**double** num1,**double** num2)

{

**double** res=num1+num2;

**return** res;

}

}