

Methods and its Types (Assignment)

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What is a Method?

A method is a set of statements to perform a particular task assigned to it.

Syntax of a method:

A method basically will have the following parameters.

- ✓ Method Name
- ✓ Return Type
- ✓ Parameters (A method may or may not contain parameters)
- ✓ Definition

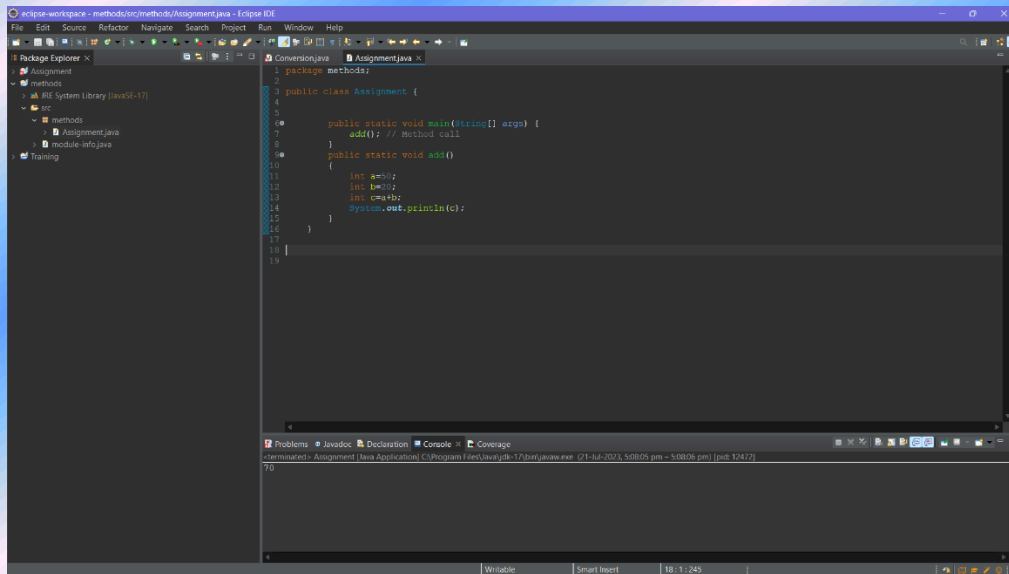
Note:

In order to execute a method, it has to be called by using its name.

Methods are broadly classified into 4 types based on whether they accept the parameters and return the value.

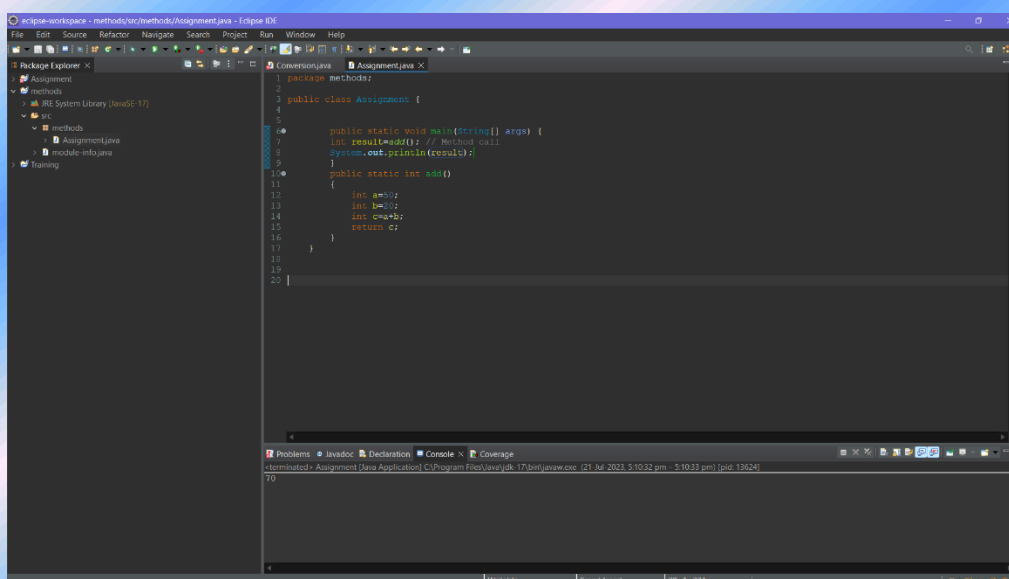
- Type1 Method (They neither accept input nor return a value)
- Type2 Method (They will not accept the input but return a value in the output)
- Type3 Method (They will accept the parameters as the input but will not return any value as output)
- Type4 Method (They will accept the parameters as input as well as they return a value as output)

Type1 Method



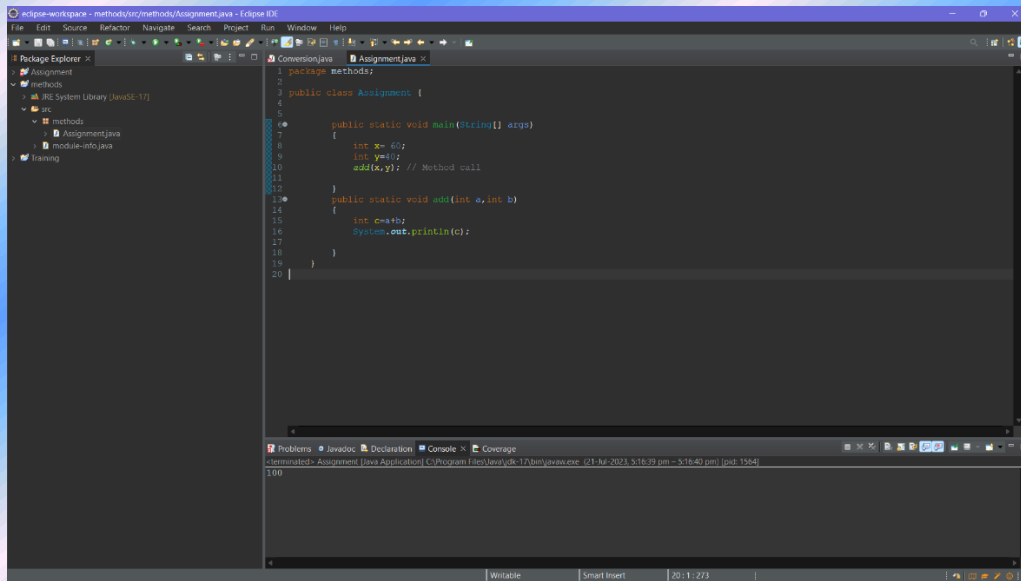
- Type 1 method which will neither take parameters as input nor gives a value as output

Type2 Method



- Type 2 method which would not take any parameters as input but would give a value as output

Type3 Method



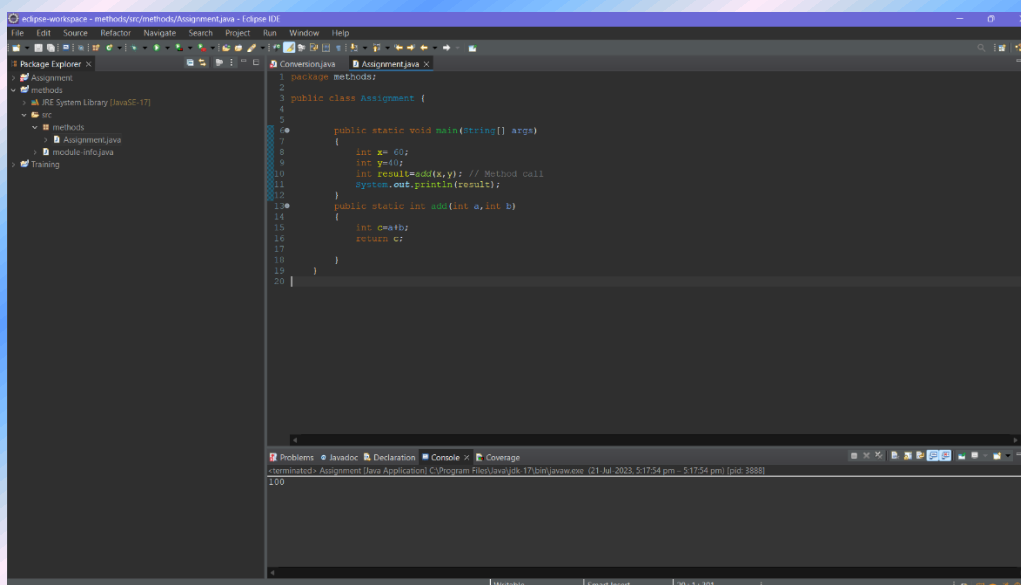
The screenshot shows the Eclipse IDE with a Java project named 'methods'. The Package Explorer on the left shows the project structure. The main editor displays the file 'Assignment.java' with the following code:

```
1 package methods;
2
3 public class Assignment {
4
5
6     public static void main(String[] args)
7     {
8         int x= 60;
9         int y=40;
10        add(x,y); // Method call
11    }
12
13    public static void add(int a,int b)
14    {
15        int c=a+b;
16        System.out.println(c);
17    }
18
19 }
20
```

The bottom console shows the output: '100'.

- Type 3 method which would take parameters as input but will not give any value as output

Type4 Method



The screenshot shows the Eclipse IDE with a Java project named 'methods'. The Package Explorer on the left shows the project structure. The main editor displays the file 'Assignment.java' with the following code:

```
1 package methods;
2
3 public class Assignment {
4
5
6     public static void main(String[] args)
7     {
8         int x= 60;
9         int y=40;
10        int result=add(x,y); // Method call
11        System.out.println(result);
12    }
13
14    public static int add(int a,int b)
15    {
16        int c=a+b;
17        return c;
18    }
19
20 }
21
```

The bottom console shows the output: '100'.

- Type 4 method which would accept parameters as input as well as give a value as output