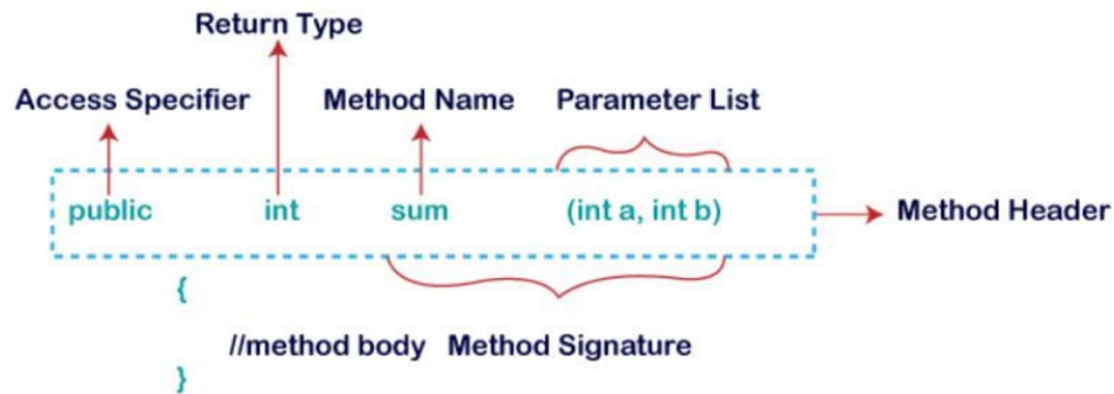


Methods

Method is a collection of instructions that performs a specific task.

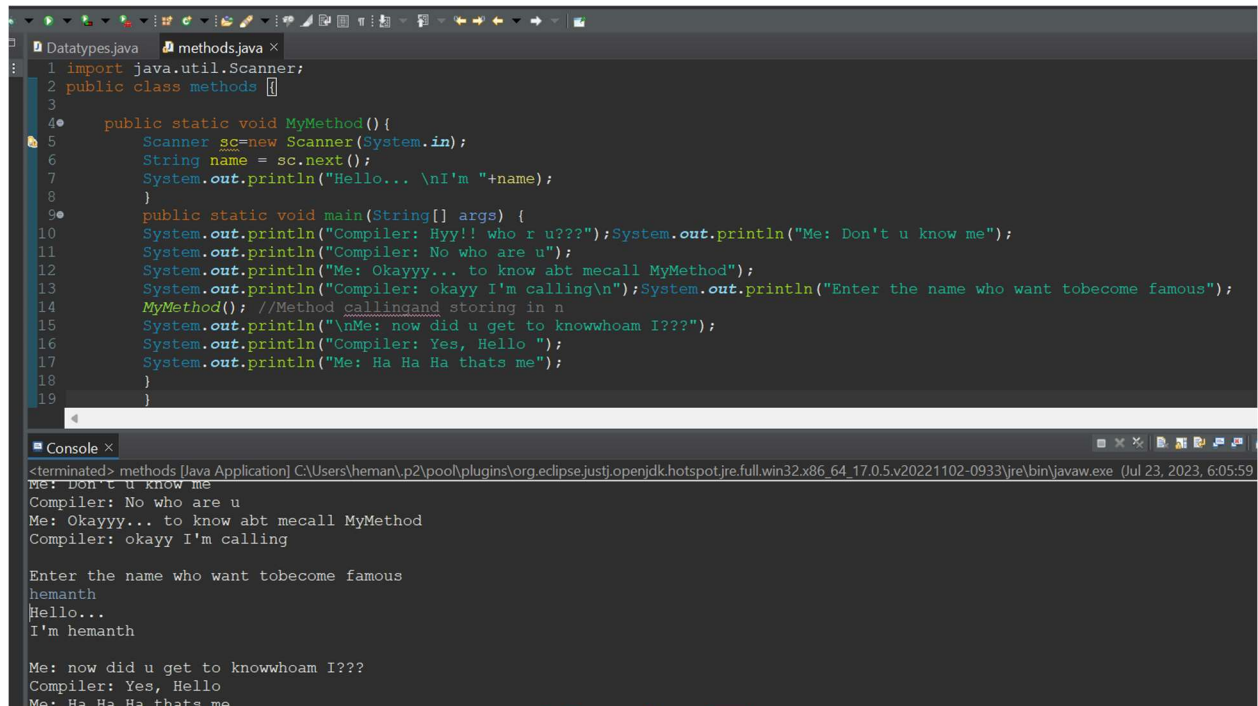
Syntax of Method/Method Declaration



Based on whether the method is accepting the parameter and returning the value or not methods are classified into 4 types .

- **Type 1** - Methods with no parameters and no return value
- **Type 2** - Methods with no parameters and return value
- **Type 3** - Methods with parameters and no return value
- **Type 4** - Methods with parameters and return value

1. Type 1 Methods with no parameters and no return value



The screenshot shows an IDE with two windows. The top window, titled 'methods.java', contains the following Java code:

```
1 import java.util.Scanner;
2 public class methods {
3
4     public static void MyMethod(){
5         Scanner sc=new Scanner(System.in);
6         String name = sc.next();
7         System.out.println("Hello... \nI'm "+name);
8     }
9
10    public static void main(String[] args) {
11        System.out.println("Compiler: Hyy!! who r u???");System.out.println("Me: Don't u know me");
12        System.out.println("Compiler: No who are u");
13        System.out.println("Me: Okayyy... to know abt mecall MyMethod");
14        System.out.println("Compiler: okayy I'm calling\n");System.out.println("Enter the name who want tobecome famous");
15        MyMethod(); //Method callingand storing in n
16        System.out.println("\nMe: now did u get to knowwhoam I???");
17        System.out.println("Compiler: Yes, Hello ");
18        System.out.println("Me: Ha Ha Ha thats me");
19    }
20 }
```

The bottom window, titled 'Console', shows the output of the program:

```
<terminated> methods [Java Application] C:\Users\heman\p2\poo\plugins\org.eclipse.justi.openjdk.hotspot.jre.full.win32.x86_64.17.0.5.v20221102-0933\jre\bin\javaw.exe (Jul 23, 2023, 6:05:59)
Me: Don't u know me
Compiler: No who are u
Me: Okayyy... to know abt mecall MyMethod
Compiler: okayy I'm calling

Enter the name who want tobecome famous
hemanth
Hello...
I'm hemanth

Me: now did u get to knowwhoam I???
Compiler: Yes, Hello
Me: Ha Ha Ha thats me
```

A large, diagonal, semi-transparent red watermark with the word 'ASSIGNMENT' is overlaid across the bottom half of the image.

2. Type 2 Methods with no parameters and return value

```
Datatypes.java  methods.java ×
1 import java.util.Scanner;
2 public class methods {
3     public static String MyMethod() {
4         Scanner sc=new Scanner(System.in);
5         String name = sc.next();
6         System.out.println("Hello... \nI'm "+name);
7         return name;
8     }
9     public static void main(String[] args) {
10        System.out.println("Compiler: Hyy!! who r u???");
11        System.out.println("Me: Don't u know me");
12        System.out.println("Compiler: No who are u");
13        System.out.println("Me: Okayyy... to know abt me call MyMethod");
14        System.out.println("Compiler: okayy I'm calling\n");
15        System.out.println("Enter the name who want to become famous");
16        String n = MyMethod(); //Method calling and storing in n
17        System.out.println("\nMe: now did u get to know who amI???");
18        System.out.println("Compiler: Yes, Hello " + n);
19        System.out.println("Me: Ha Ha Ha thats me");
20    }
21 }
```

```
Console ×
<terminated> methods [Java Application] C:\Users\heman\p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86
Compiler: Hyy!! who r u???
Me: Don't u know me
Compiler: No who are u
Me: Okayyy... to know abt me call MyMethod
Compiler: okayy I'm calling

Enter the name who want to become famous
hemanth
Hello...
I'm hemanth

Me: now did u get to know who amI???
Compiler: Yes, Hello hemanth
Me: Ha Ha Ha thats me
```

3. Type 3 Methods with parameters and no return value

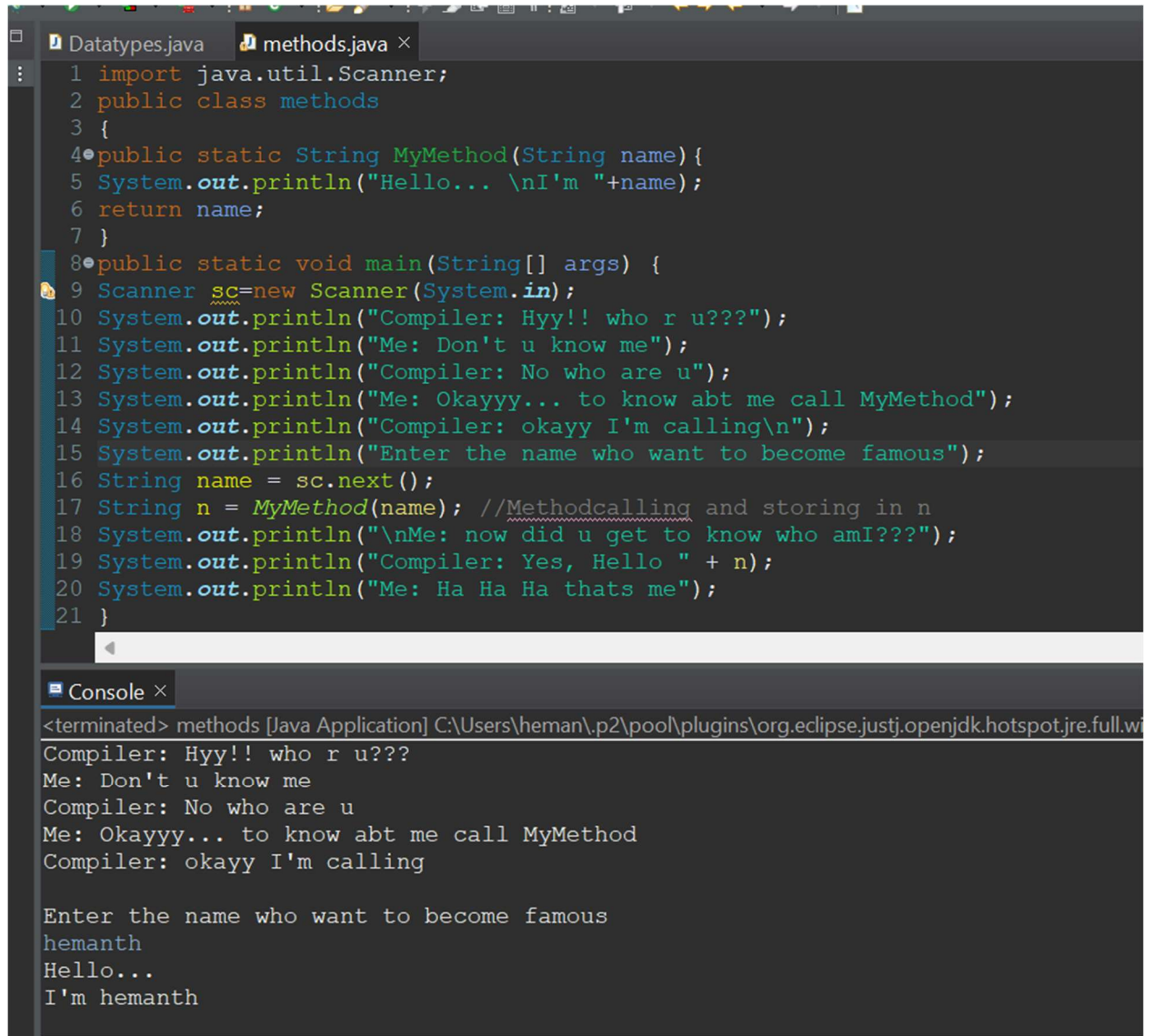
```
Datatypes.java  *methods.java x
1 import java.util.Scanner;
2 public class methods {
3     public static void MyMethod(String name){
4         System.out.println("Hello... \nI'm "+name);
5     }
6     public static void main(String[] args) {
7         Scanner sc=new Scanner(System.in);
8         System.out.println("Compiler: Hyy!! who r u???");System.out.println("Me: Don't u know me");
9         System.out.println("Compiler: No who are u");
10        System.out.println("Me: Okayyyy... to know abt me call MyMethod");
11        System.out.println("Compiler: okayy I'm calling\n");System.out.println("Enter the name who want to become famous");
12        String name = sc.next();
13        MyMethod(name); //Method callingand storing in n
14        System.out.println("\nMe: now did u get to knowwhoam I???");
15        System.out.println("Compiler: Yes, Hello " + name);System.out.println("Me: Ha Ha Ha thats me");
16    }
17 }
```

```
Console x
<terminated> methods [Java Application] C:\Users\heman\p2\pool\plugins\org.eclipse.justi.openjdk.hotspot.jre.full.win32.x86_64_17.0.5.v20221102-0933\jre\bin\javaw.exe (Jul 23, 20
Compiler: Hyy!! who r u???
Me: Don't u know me
Compiler: No who are u
Me: Okayyyy... to know abt mecall MyMethod
Compiler: okayy I'm calling

Enter the name who want to become famous
hemanth
Hello...
I'm hemanth

Me: now did u get to knowwhoam I???
Compiler: Yes, Hello hemanth
```


4. Type 4 Methods with parameters and return value



```
Datatypes.java  methods.java ×
1 import java.util.Scanner;
2 public class methods
3 {
4 •public static String MyMethod(String name){
5 System.out.println("Hello... \nI'm "+name);
6 return name;
7 }
8 •public static void main(String[] args) {
9 Scanner sc=new Scanner(System.in);
10 System.out.println("Compiler: Hyy!! who r u???");
11 System.out.println("Me: Don't u know me");
12 System.out.println("Compiler: No who are u");
13 System.out.println("Me: Okayyy... to know abt me call MyMethod");
14 System.out.println("Compiler: okayy I'm calling\n");
15 System.out.println("Enter the name who want to become famous");
16 String name = sc.next();
17 String n = MyMethod(name); //Methodcalling and storing in n
18 System.out.println("\nMe: now did u get to know who amI???");
19 System.out.println("Compiler: Yes, Hello " + n);
20 System.out.println("Me: Ha Ha Ha thats me");
21 }
```

```
Console ×
<terminated> methods [Java Application] C:\Users\heman\p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.w
Compiler: Hyy!! who r u???
Me: Don't u know me
Compiler: No who are u
Me: Okayyy... to know abt me call MyMethod
Compiler: okayy I'm calling

Enter the name who want to become famous
hemanth
Hello...
I'm hemanth
```

A