

Types of Method

Type I:- Which does not return any value and also not going to accept any argument

Ex 1:- No-return type
Without arguments

Syntax:-
void method-name()
{
 //statements
}

Note: 'void' keyword is used when the method is not returning any value.

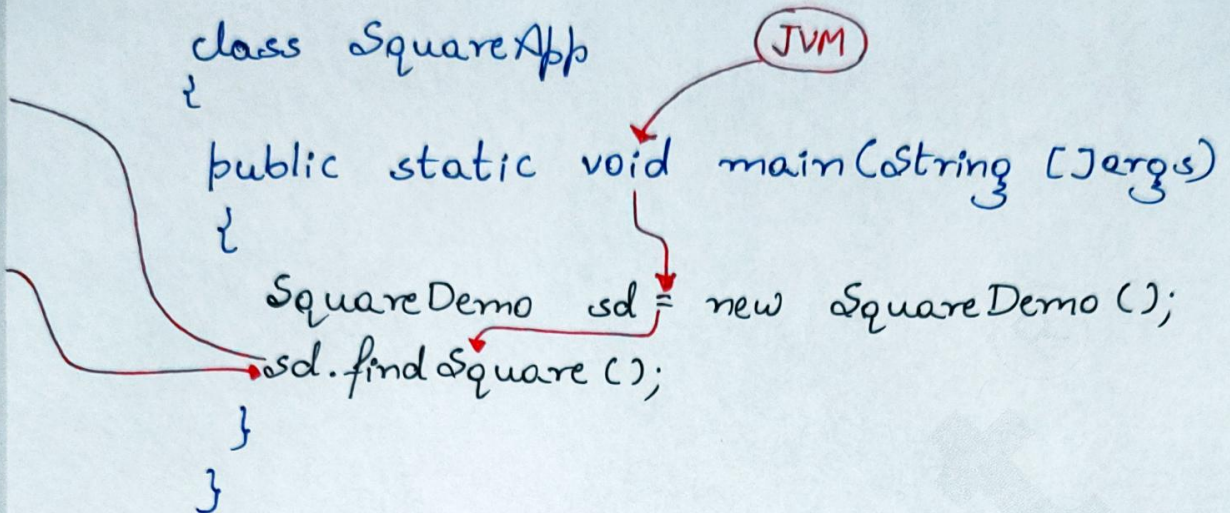
Program:

```
class SquareDemo
{
    void findSquare()
    {
        int num = 20;
        int sq = num * num;
        System.out.println("Square = " + sq);
    }
}
```




```
class SquareApp
{
    public static void main(String [] args)
    {
        SquareDemo sd = new SquareDemo();
        sd.findSquare();
    }
}
```

JVM



num 20

sq 400

Output:

Square = 400

Type II: Which does not return any value but it will accept some value from the caller.

Ex 2: No-return type
With arguments

Syntax: void method_name(arguments)
{
 // statements
}



Program:

```
class SquareDemo
{
    void findSquare (int num)
    {
        int sq = num * num;
        System.out.println ("Square = " + sq);
    }
}

class SquareApp
{
    public static void main (String [] args)
    {
        SquareDemo sd = new SquareDemo();
        sd.findSquare (20);
    }
}
```

Diagram annotations:

- A green cloud with the number 20 has an arrow pointing to the argument 20 in `sd.findSquare (20);`.
- A red oval labeled JVM has an arrow pointing to the `main` method.
- Red arrows show the flow of execution: from `main` to `findSquare`, then to the calculation `int sq = num * num;`, then to the print statement, and finally back to the `main` method.

num 20

sq 400

Output:

Square = 400



Type III: Method which is going to return some value back to the caller and also accept some value from the caller

Ex 3:- Return-Type
with argument

Syntax:-
return-type method-name(arguments)
{
 //statements
}

Program:-

```
class SquareDemo
```

```
{  
    int findSquare(int num)  
    {  
        int sq = num * num;  
        return sq;  
    }  
}
```

100

20

JVM

```
class SquareApp
```

```
{  
    public static void main(String args)
```

```
{  
        SquareDemo sd = new SquareDemo();
```

```
        int res = (sd.findSquare(20));
```

```
        System.out.println("Square = " + res); } }
```



num 20res 400sq 400

Output:

Square = 400

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Type IV: Method which is going to return some value to the caller without taking any value from the caller.

Ex: 4 :- Return-Type

Without arguments

Syntax:-

```
return-type method-name()  
{  
    //statements  
}
```



Program:

```
class SquareDemo
{
    int findSquare()
    {
        int num = 20;
        int sq = num * num;
        return sq;
    }
}

class SquareApp
{
    public static void main(String [] args)
    {
        SquareDemo sd = new SquareDemo();
        int res = sd.findSquare();
        System.out.println("Square = " + res);
    }
}
```

Output:

Square = 400

