



# Method overloading

# Method Overloading

- **Method overloading** is a feature that allows us to have more than one method with the **same name**, so long as we use **different parameters**.
- It is the ability to create multiple methods of the same name with different implementations.

# Method Overloading

- It improves the code readability and re-usability.
- It is easier to remember one method name instead of remembering multiple names.
- Overloaded methods give programmers the flexibility to call similar method with different types of data.

# Method Overloading

```
public static int sumTwoNumbers(int a, int b) {  
    return a + b;  
}  
  
public static int sumThreeNumbers(int a, int b, int c) {  
    return a + b + c;  
}  
  
public static int sumFourNumbers(int a, int b, int c, int d) {  
    return a + b + c + d;  
}
```

**BAD PRACTICE!**

```
public static int sum(int a, int b) {  
    return a + b;  
}  
  
public static int sum(int a, int b, int c) {  
    return a + b + c;  
}  
  
public static int sum(int a, int b, int c, int d) {  
    return a + b + c + d;  
}
```

**GOOD PRACTICE!**

# Remember

- Return Type of the overload method does not have to be same.
- Parameters MUST be different
- Pretty much all methods in java, can be overload