

ICS4U – Java Methods – Method Overloading

There may be more than one method with the same name. This is called “overloading”. The two methods with the same name must have unique parameter sets. The example below has two methods;

```
public class ExampleMethod {  
  
    public static void main (String[] args) {  
        System.out.println(getAverage(5,8));  
    }  
  
    public double getAverage (double a, double b) { // parameters: integer, integer  
        double avg = (a+b)/2;  
        return avg;  
    }  
  
    public double getAverage (double a, double b, double c) { // parameters: integer, integer, integer  
        double avg = (a+b+c)/3;  
        return avg;  
    }  
}
```

Note: you may also overload by changing the order of the parameters as long as the parameters have different types.

```
public class ExampleMethod2 {  
    public static void main (String[] args) {  
        sayHello("Arvid", 16);  
        sayHello(15, "Darlene");  
    }  
  
    public static void sayHello (String name, int age) {  
        System.out.println ("hello " + name + " you are " + age + " year(s) old");  
    }  
  
    public static void sayHello (int age, String name) {  
        System.out.println ("you are " + age + " year(s) old " + name);  
    }  
}
```

When the method is invoked, the method with the matching parameters will be the one that is executed.