**Topic 2: Methods with Return Types**

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**More methods**

Just as our pseudocode methods could return a value, Java also allows methods to have a **return type**.

First lets look again at the main method.

**public static void main(String[] args)**

This is a **public** method, meaning it will be accessible to code outside of the class. It is **static**, as was explained in the previous topic, it means we don't need to create an object to call this method. The **identifier**, meaning the name, is main. The **parameters** are String[] args. Finally, the **return type** is void, meaning this method does not return any value.

Here is an example of a method called createUserName, inside of a class called User, similar to the Week 8 examples we saw when we first learned about methods.  
  
public class User {  
  public static void main(String[] args) {  
    String userName = createUserName();  
    System.out.println("User name is " + userName);  
  }  
   
  public static String createUserName() {  
    String name = "Abdul";  
    int age = 12;  
    String userName = name + age;  
    return userName;  
  }  
}

The method createUserName is called in main, it returns a string that is assigned to the variable userName. We can call the method without having created a User object because the method is static.

**Printing a variable in Java**

Attached Files:

* + [[File](https://dmacc.blackboard.com/bbcswebdav/pid-3812344-dt-content-rid-72487194_1/xid-72487194_1) PrintingAVariable.java](https://dmacc.blackboard.com/bbcswebdav/pid-3812344-dt-content-rid-72487194_1/xid-72487194_1) (500 B)

The code below and attached prints a variable. The String variable is created by concatenating them, joinging them with the first variable followed by the second with no spaces. Notice the concatenation in the System.out.println statement, it adds a space in the string literal so the is not concatenated with the variable. Play with the spacing, remove the space and see the difference.

[**Return Value Method**](https://dmacc.blackboard.com/webapps/assignment/uploadAssignment?content_id=_3812349_1&course_id=_69150_1&group_id=&mode=view)

Let's make a method that returns a value to main. You must make the call in main accept the value and store it to a variable before printing it out.

* + Write a method named **returnLucky**, that returns a string. Make the string by appending a string representing your name and a number representing your lucky number.
  + Call the method from main. Print the return value in main.

Run and test it. Submit your .java file.

This is worth 10 points.