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2. A method consists of a declaration and a body. The method declaration includes access level, return type, name, and parameters, if any. The method body contains the statements that implement the method.

3. The access level of a method determines if other classes can call the method. The keyword `public` is an access modifier, meaning that it is used for the access level for classes, methods, attributes, and constructors.

4. The access level of a method can also be thought as its visibility

5.

Var1: is declared in `main()`

Var2: is declared in the `for` statement in `main()`

Var3: is declared in `method1()`

Var 4: is declared in the `for` statement in `method1()`

6.

- a. `public static int getVowels(String s);`
- b. `public static int extractDigits(int n);`
- c. `public static String insertString(String x, int n);`

7.

- a. The compiler uses the types, order, and number of parameters to determine which method to execute
- b. Yes, as long as the parameters are different

8.

- a. The `return` statement is used to value back to the calling statement.
- b. The `return` statement can only return one value
- c. It contains a `return` statement instead of a `void`

9. The program ignores the returned value the first time the method is called. Instead it should be called in an assignment statement.

11.

- a. True
- b. False. A a method call consists method name that is followed by a `()`
- c. False, A `void` method cannot return a value
- d. False, The access modifier determines the access level. The return level comes after that
- e. True
- f. False, ,method are enclosed by parentheses `()`

- g. False, local variables can only be used in the method it is declared in
- h. True
- i. False, Method overloading is when more than one method of the same name is included in a class
- j. True
- k. False, the precondition of a method states the assumptions or initial requirements so the method
- l. False, the postcondition of a method states what must be true after the method has been executed