

# Accessor & Mutator Methods

Mr. Poole  
Java

# Accessor & Mutator Methods

Accessor Method: also called **get methods** or **getters**, allow a way to get the value of each instance variable from outside of the class

Mutator Method: also called **setter methods**, are used to control changes to a variable. They are also widely known as setter methods.

These methods help with **scope**! These methods change how to access your classes and what variables should be accessed/changed.

# Accessor Method

```
public class MrPoole{  
    String name;  
  
    public String getName(){  
        return name;  
    }  
}
```

As seen before, this is a  
Accessor Method.

It accesses a private  
variable using a method  
and returns it to the  
outside class.

# Mutator Method

```
public class MrPoole{  
    String name;  
  
    public void setName(String a){  
        name = a;  
    }  
}
```

This is a mutator method.

It changes name.

Name can be changed by the outside class.

## Both Methods

```
public class MrPoole{  
    String name;  
  
    public void setName(String a){  
        name = a;  
    }  
    public String getName(){  
        return name;  
    }  
}
```

In combination,  
we can **set** the and **get** the  
name of a private variable in  
the MrPoole class.

**SKIP THIS LAB**

# Lab: Part 1

1. Create the Dwarf class.
  - a. Global Variable name and age
  - b. This should have an empty constructor
    - i. Empty constructor sets name to "" and age to 0
  - c. Accessor and Mutator methods for both name and age should be created.

# Lab: Part 2

2. In your main

- a. Create 7 dwarves
- b. Set their names randomly to “Grumpy”, “Dopey”, “Doc”, “Happy”, “Bashful”, “Sneezy”, “Sleepy”
- c. Set their ages between 1 and 100 randomly.
- d. Then in a separate loop, print out all names and ages.

Hint: don't forget to construct your dwarves.