

Gnomes

- (1) Write a method in class `Gnome` that sets the buddy of a gnome to the gnome specified as parameter.

```
public void setBuddy (Gnome g)
```

- (2) How does a gnome look like after the following:

```
Gnome g;
```

- (3) How does a gnome look like after the following:

```
Gnome g;  
g = new Gnome();
```

- (4) What does it mean for the instance variables of a class to be
- (a) private
 - (b) public

- (5) When designing a class, what are the guidelines on what is public and what is private?

- (6) Write a piece of code that tests class Gnome; for e.g. you could create 3 gnome called Grumpy, Goofy and Dummy; make Goofy the buddy of Grumpy, Dummy of Goofy, and Grumpy of Dummy.

- (7) Write a method that prints the buddy of a gnome.

- (8) Write a method that prints the buddy of the buddy of a gnome.

- (9) How would you modify the class in order to keep track of how many gnomes have been created?