6.1P Question 4

There are multiple errors in this program that prevents the code from running.

For example, when calling the greeting() function, the function must start with a capital letter, similar to the Greeting method used in the animal class.

Another error is seen through the code “Animal animal4 = new Animal();” in which the code calls for a new object under the animal class, which is not allowed as instances cannot be created from abstract classes.

“Dog dog3 = (Dog)animal3;” is also an invalid code as the variable animal3 has already been allocated to BigDog.

The same thing applies to “Cat cat2 = (Cat)animal2;” as animal2 is already assigned to Dog

The last errors involves calling the wrong parameters when calling the Greeting method, for example: dog2.greeting(bigDog2);, bigDog2.greeting(dog2); and bigDog2.greeting(bigDog1); all have different parameters. Although the parameters don’t change much (the output depends on whether there is an input or not, specific parameter names won’t change anything), it is best to allocate the correct parameter name for each function.

This is the output of the fixed code:

Cat: Meow!

Dog: Woof!

BigDog: Woow!

Cat: Meow!

Dog: Woof!

BigDog: Woow!

Dog: Woooooooooof!

Woooooowwwww!

Woooooowwwww!

As you can see, the outputs of each animal is based off each subclass of animal.