

Chapter 8, #4 – Excavator Interface.

```
package Homework3.construction;
public interface Excavator {
    void dig();
}
--- --- --- --- ---

package Homework3.construction;
public class Archaeologist implements Excavator{
    private String name;
    private String sex;
    private int age;
    public Archaeologist(String name, String sex, int age){
        this.age = age;
        this.name = name;
        this.sex = sex;
    }
    @Override
    public void dig() {
        System.out.println("The " + sex + " archeologist " + name + " at age " + age + " became a missionary");
    }
}
--- --- --- --- ---

package Homework3.construction;
public class BackHoe implements Excavator{
    String brand;
    int horsePowers;
    public BackHoe(String brand, int horsePowers){
        this.brand = brand;
        this.horsePowers = horsePowers;
    }
    @Override
    public void dig() {
        System.out.println("The " + brand + " backhoe has almost " + horsePowers + " horse powers");
    }
}
--- --- --- --- ---

package Homework3.construction;
public class Mole implements Excavator{
    private String color;
    private int age;
    public Mole(String color, int age) {
        this.color = color;
        this.age = age;
    }
    @Override
    public void dig() {
        System.out.println("Even at " + age + " years old, the " + color + " mole still full of energy");
    }
    public String getColor() {
        return color;
    }
    public int getAge() {
        return age;
    }
    public void setColor(String color) {
        this.color = color;
    }
    public void setAge(int age) {
        this.age = age;
    }
}
--- --- --- --- ---

package Homework3.construction;
public class Compute {
    public static void main(String[] args) {
        Excavator backHoe = new BackHoe("Caterpillar", 300);
        Excavator archaeologist = new Archaeologist("Livingstone", "male", 56);
        Excavator mole = new Mole("brown", 3);
        backHoe.dig();
        archaeologist.dig();
        mole.dig();
    }
}
```

