

```
1 public class Boy extends Person{
2     static double ageFactor = 1.1;
3
4     public String talk(){
5         return(super.talk() + " ... but I love Java
    class.");
6     }
7     public String walk(){
8         return "I am now walking";
9     }
10 }
11
```

```
1 public class Girl extends Person{
2     static double ageFactor = 1.3;
3     public Girl(String aname){
4         name = "Ms. " + aname;
5     }
6     public String talk(){
7         return "Hello! " + jump();
8     }
9     public String jump(){
10        return "I am jumping.";
11    }
12
13    public static double lifeSpan(){
14        return lifespan * ageFactor;
15    }
16
17 }
18
```

```
1 //TIP To <b>Run</b> code, press <shortcut actionId
  ="Run"/> or
2 // click the <icon src="AllIcons.Actions.Execute
  "/> icon in the gutter.
3 public class Main {
4     public static void main(String[] args) {
5         //TIP Press <shortcut actionId="
  ShowIntentionActions"/> with your caret at the
  highlighted text
6         // to see how IntelliJ IDEA suggests fixing
  it.
7         System.out.printf("Hello and welcome!");
8
9         for (int i = 1; i <= 5; i++) {
10             //TIP Press <shortcut actionId="Debug
  "/> to start debugging your code. We have set one <
  icon src="AllIcons.Debugger.Db_set_breakpoint"/>
  breakpoint
11             // for you, but you can always add more
  by pressing <shortcut actionId="
  ToggleLineBreakpoint"/>.
12             System.out.println("i = " + i);
13         }
14     }
15 }
```

```
1 public class Person{
2     String name;
3     static int lifespan = 60;
4     static double ageFactor = 1.0;
5
6     public Person(){
7         name = "";
8     }
9
10    public Person(String aName){
11        name = aName;
12    }
13    public String getName() {
14        return name;
15    }
16
17    public void setName(String aName){ name=aName;}
18    public String toString(){
19        return ("Hello, my name is " + name);
20    }
21    public String talk(){
22        return ("I have nothing to say.");
23    }
24    public String walk(){
25        return "I have nowhere to go.";
26    }
27    public static double lifeSpan(){
28        return lifespan * ageFactor;
29    }
30 }
31
```

```
1 public class GLAB3_10_1 {  
2 }  
3  
4
```

```
1 public class TestPeople{
2     public static void main(String args[]){
3         Person aPerson;
4         Boy jimmy;
5         Girl betty;
6         aPerson = new Person("Fred");
7         jimmy = new Boy();
8         betty = new Girl("Betty");
9         System.out.println(aPerson);
10        System.out.println(aPerson.talk());
11        System.out.println(aPerson.walk());
12        System.out.println();
13        System.out.println(jimmy);
14        System.out.println(jimmy.talk());
15        System.out.println(jimmy.walk());
16        System.out.println();
17        System.out.println(betty);
18        System.out.println(betty.talk());
19        System.out.println(betty.walk());
20        System.out.println();
21        System.out.println((Person)jimmy);
22        System.out.println(((Person)jimmy).talk());
23        System.out.println(((Person)jimmy).walk());
24        System.out.println();
25        System.out.println((Person)betty);
26        System.out.println(((Person)betty).talk());
27        System.out.println(((Person)betty).walk());
28        System.out.println();
29
30        System.out.println(Person.lifeSpan());
31        System.out.println(Boy.lifeSpan());
32        System.out.println(Girl.lifeSpan());
33
34        System.out.println(((Boy)aPerson).talk());
35    }
36 }
37
```