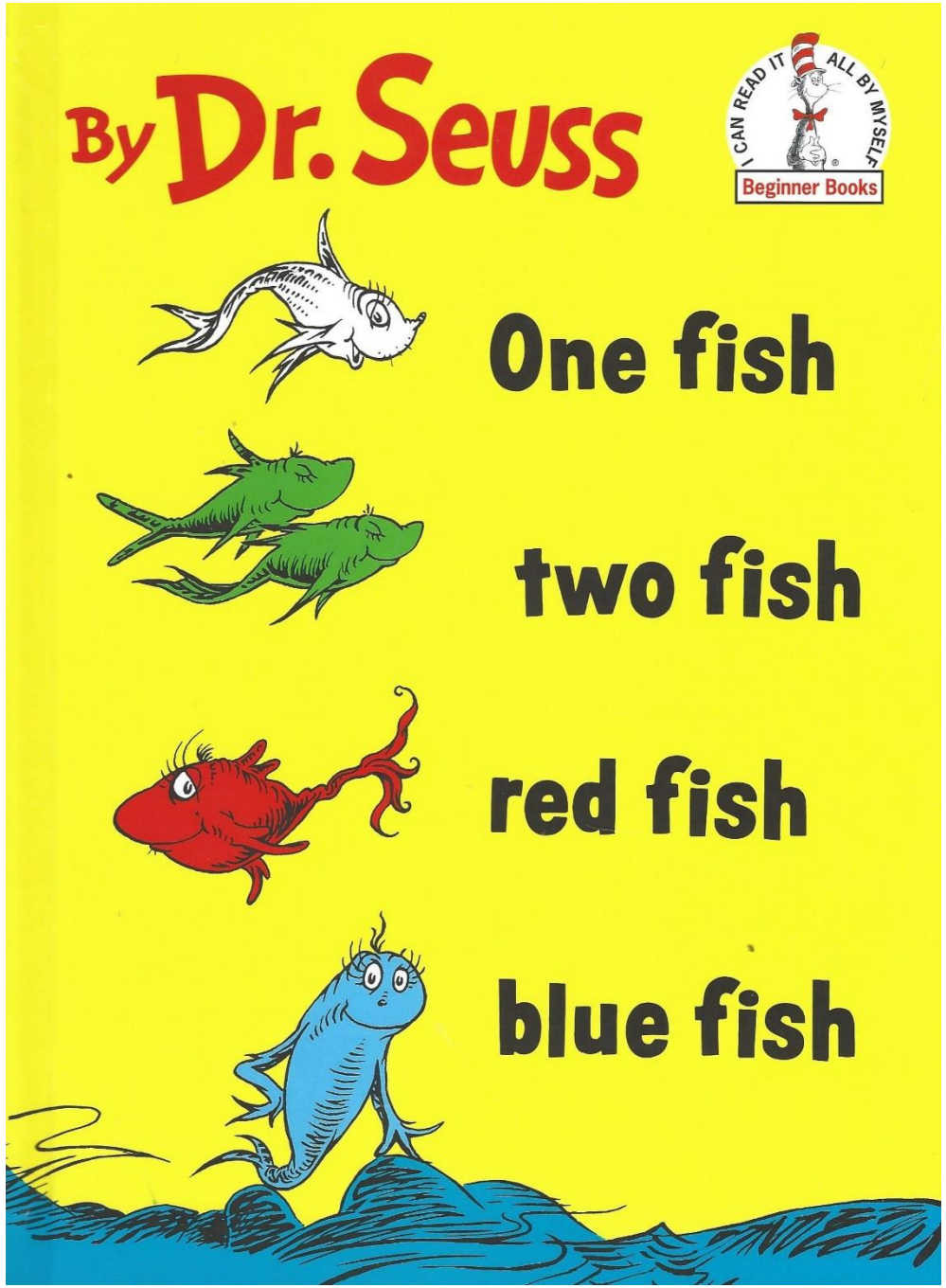
Void Methods

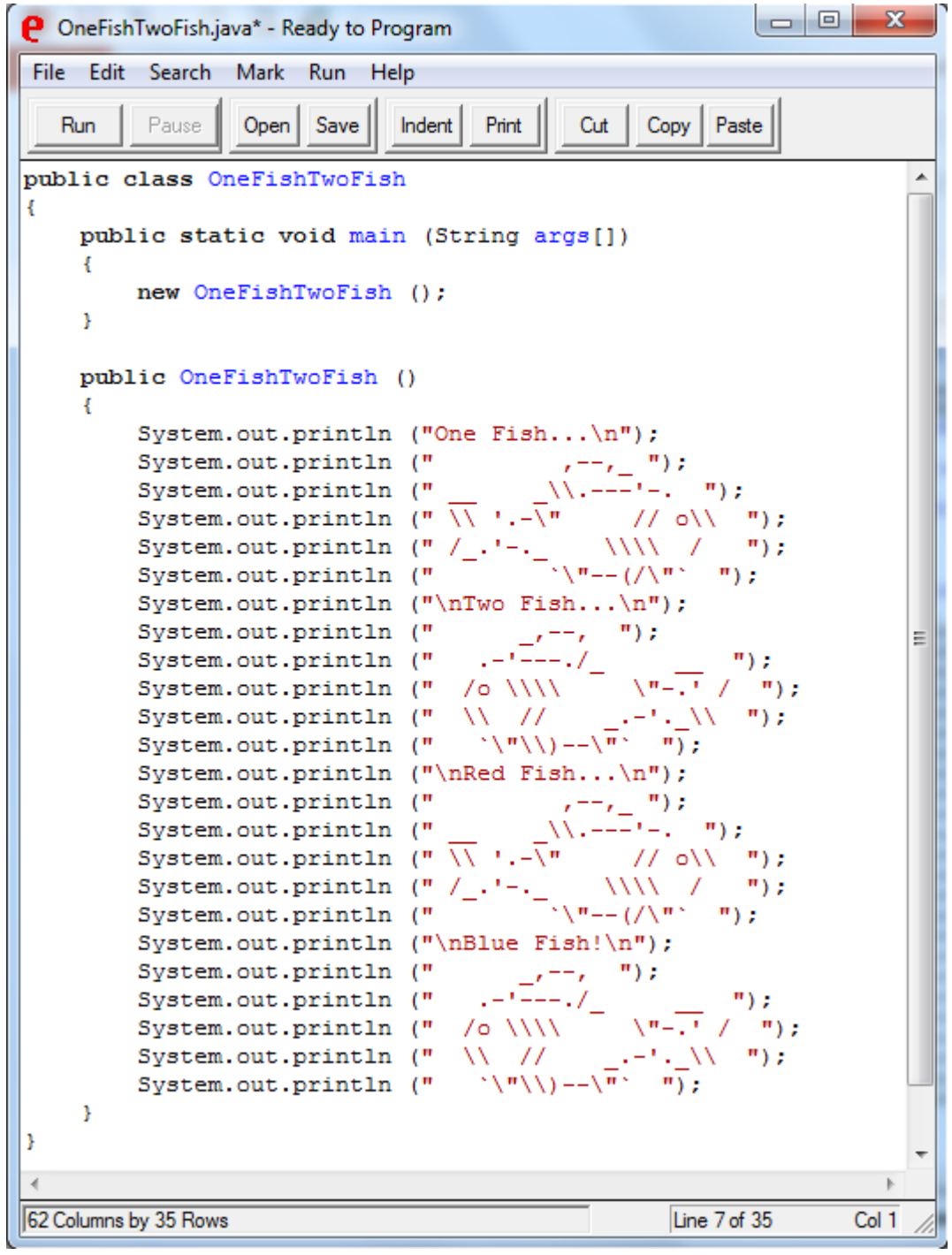
The basics….

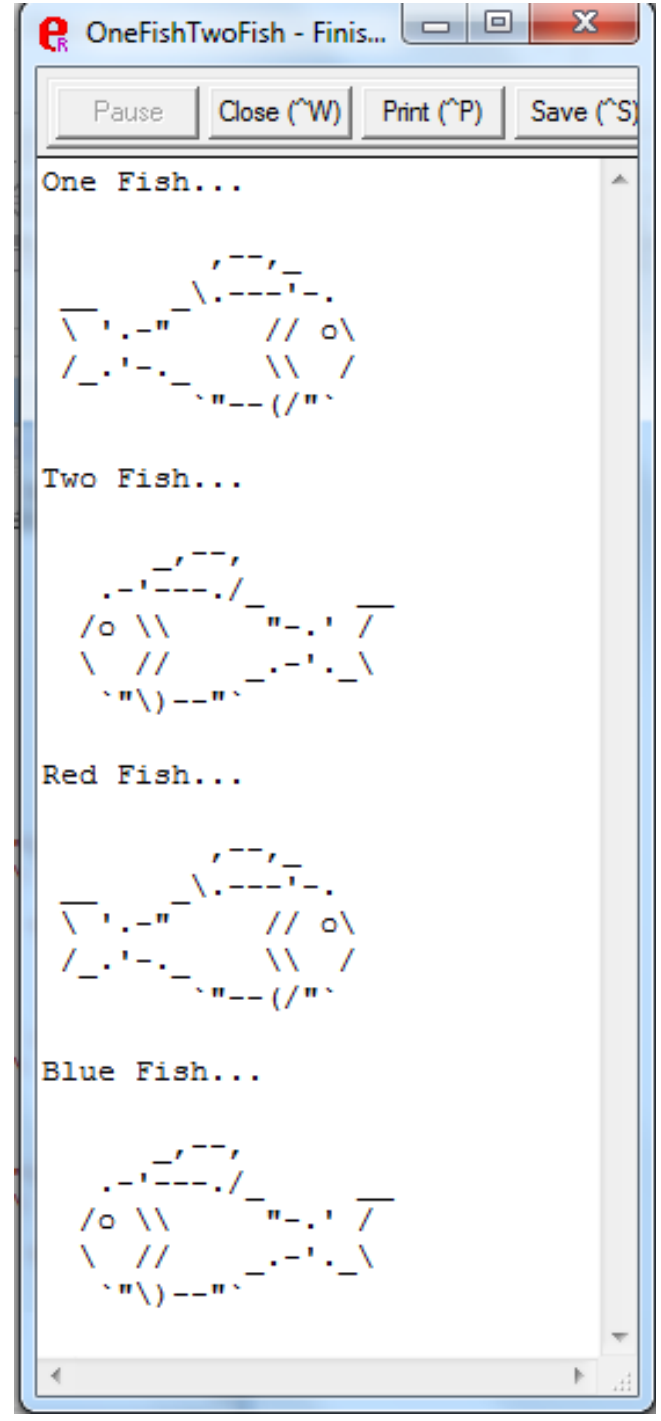


Suppose that you wanted to remake this book cover.

But I don't want to do that. It seems pointless.

Can't you just play along? It's Dr. Seuss.


OneFishTwoFish.java* - Ready to Program
File Edit Search Mark Run Help
Run Pause Open Save Indent Print Cut Copy Paste
public class OneFishTwoFish
{
public static void main (String args[])
{
new OneFishTwoFish ();
}
public OneFishTwoFish ()
{
System.out.println ("One Fish...\n");
System.out.println (" ,--,_ ");
System.out.println ("__ _\\.---'-. ");
System.out.println ("\\ '.-\" // o\\ ");
System.out.println ("/_.'-._ \\\\ / ");
System.out.println (" `\"--(/\"` ");
System.out.println ("\nTwo Fish...\n");
System.out.println (" _,--, ");
System.out.println (" .-'---./_ __ ");
System.out.println ("/o \\\\ \"-.' / ");
System.out.println ("\\ // _.-'._\\ ");
System.out.println (" `\"\\)--\"` ");
System.out.println ("\nRed Fish...\n");
System.out.println (" ,--,_ ");
System.out.println ("__ _\\.---'-. ");
System.out.println ("\\ '.-\" // o\\ ");
System.out.println ("/_.'-._ \\\\ / ");
System.out.println (" `\"--(/\"` ");
System.out.println ("\nBlue Fish!\n");
System.out.println (" _,--, ");
System.out.println (" .-'---./_ __ ");
System.out.println ("/o \\\\ \"-.' / ");
System.out.println ("\\ // _.-'._\\ ");
System.out.println (" `\"\\)--\"` ");
}
62 Columns by 35 Rows
Line 7 of 35 Col 1


OneFishTwoFish - Finis...
Pause Close (^W) Print (^P) Save (^S)
One Fish...
,--,_
__ _\.---'-.
\ '.-" // o\
/_.'-._ \\ /
`"--(/"`
Two Fish...
_,--,
.-'---./_ __
/o \\ "-.' /
\ // _.-'._\
`"\)--"`
Red Fish...
,--,_
__ _\.---'-.
\ '.-" // o\
/_.'-._ \\ /
`"--(/"`
Blue Fish...
_,--,
.-'---./_ __
/o \\ "-.' /
\ // _.-'._\
`"\)--"`

```
public class OneFishTwoFish
{
    public static void main (String args[])
    {
        new OneFishTwoFish ();
    }

    public OneFishTwoFish ()
    {
        System.out.println ("One Fish...\n");
        System.out.println ("          ,--,_ ");
        System.out.println ("  __    _\\.---'-.  ");
        System.out.println (" \\ '.-\"      // o\\  ");
        System.out.println (" /_.'-._     \\\\\\  /  ");
        System.out.println ("         `\"--(/\"`  ");
        System.out.println ("\nTwo Fish...\n");
        System.out.println ("       _,--,  ");
        System.out.println ("   .-'---./_       __  ");
        System.out.println ("  /o \\\\\\     \"-.' /  ");
        System.out.println ("  \\\\  //    _.-'._\\\\  ");
        System.out.println ("   `\"\\\\)--\"`  ");
        System.out.println ("\nRed Fish...\n");
        System.out.println ("          ,--,_ ");
        System.out.println ("  __    _\\.---'-.  ");
        System.out.println (" \\ '.-\"      // o\\  ");
        System.out.println (" /_.'-._     \\\\\\  /  ");
        System.out.println ("         `\"--(/\"`  ");
        System.out.println ("\nBlue Fish!\n");
        System.out.println ("       _,--,  ");
        System.out.println ("   .-'---./_       __  ");
        System.out.println ("  /o \\\\\\     \"-.' /  ");
        System.out.println ("  \\\\  //    _.-'._\\\\  ");
        System.out.println ("   `\"\\\\)--\"`  ");
    }
}
```

These pictures are the same and they take up a lot of space.

Method Name

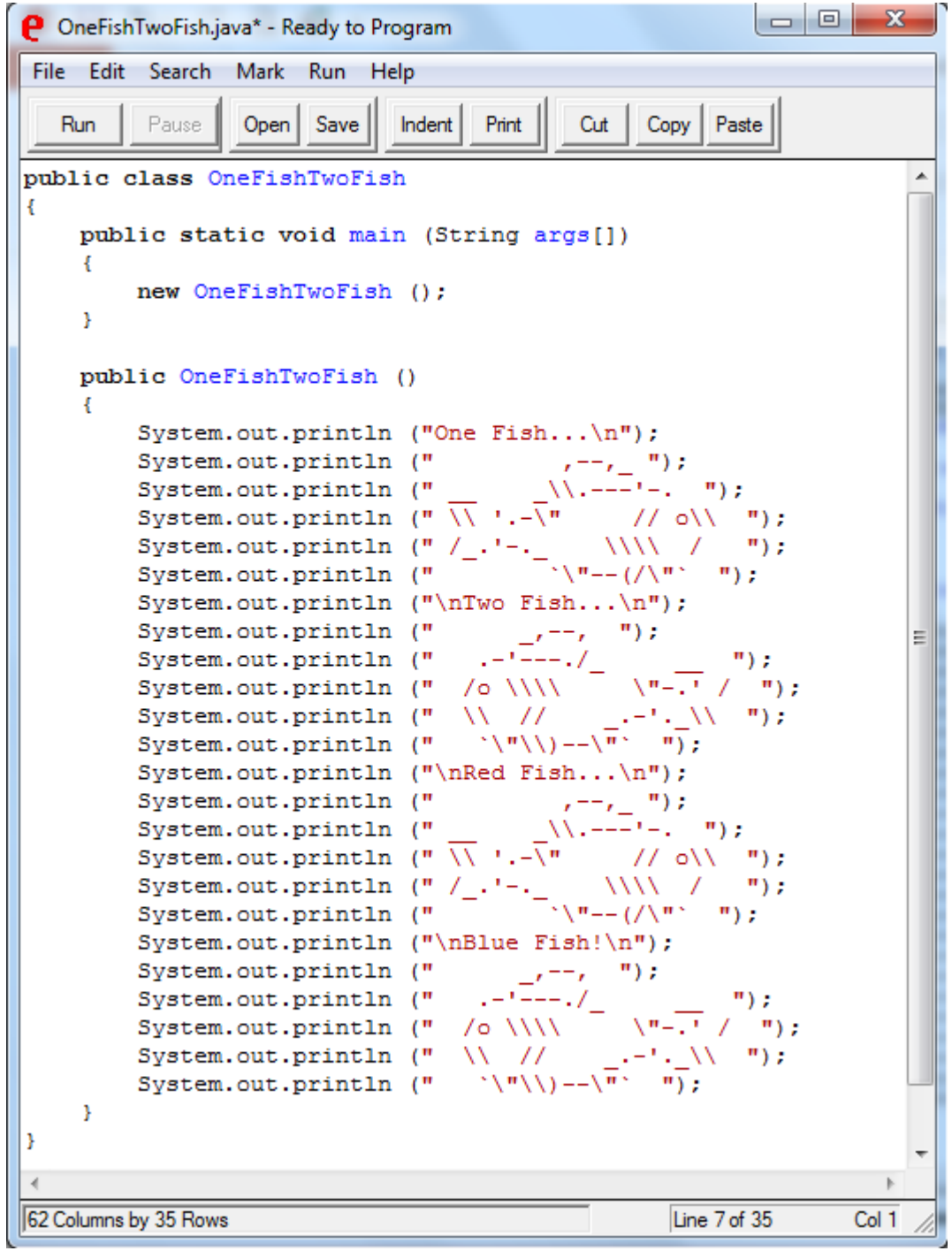
Start and End the method

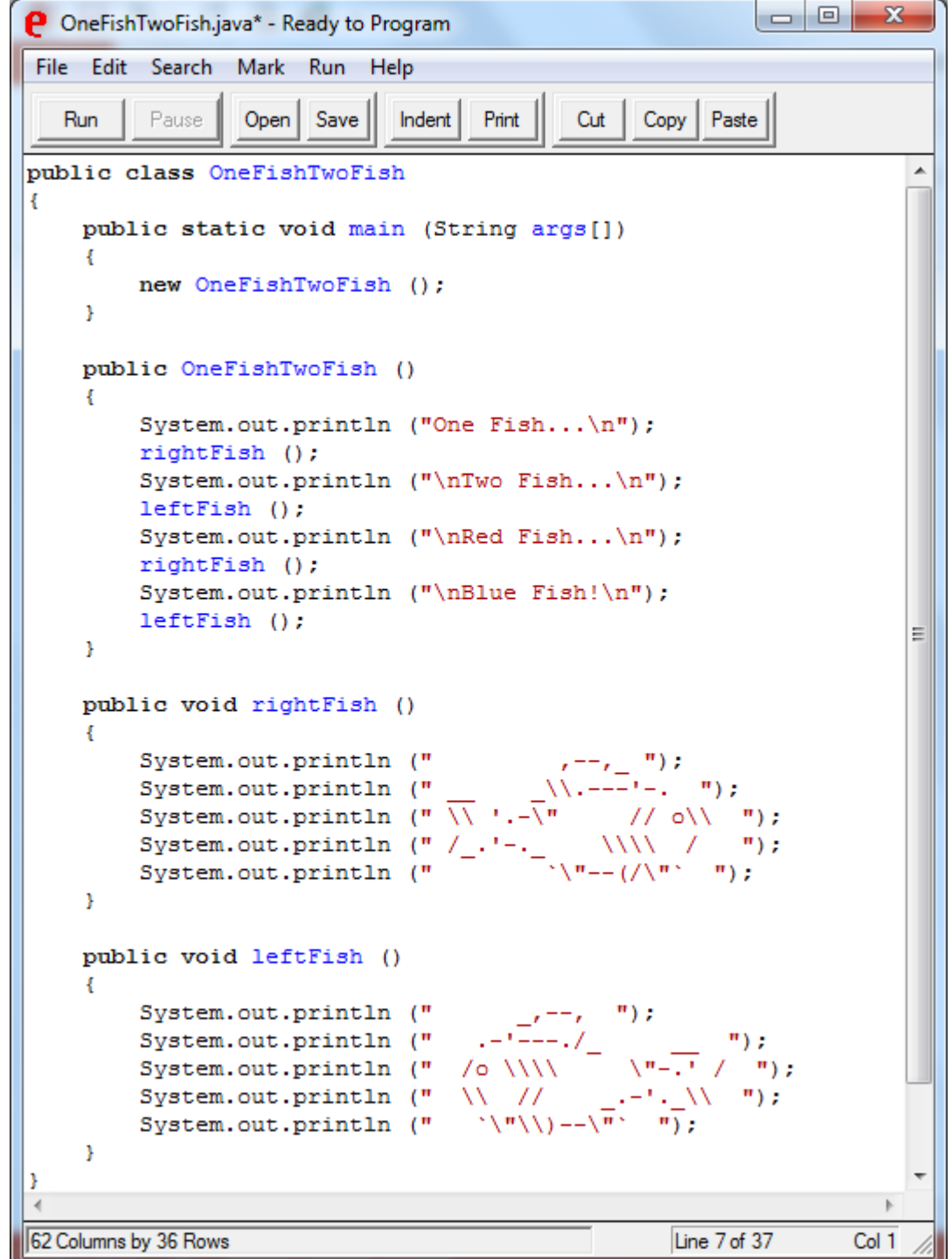
```
public void leftFish ()
{
        System.out.println ("        _,--,   ");
        System.out.println ("    .-'---./_        __   ");
        System.out.println ("  /o \\\\      \"-.' /   ");
        System.out.println ("  \\  //     _.-'._\\   ");
        System.out.println ("   `\"\\)--\"`   ");
}
```

```
public void rightFish ()
{
    System.out.println ("          ,--,_ ");
    System.out.println ("  __    _\\.---'-.  ");
    System.out.println (" \\ '.-\"     // o\\  ");
    System.out.println (" /_.'-._    \\\\\  /  ");
    System.out.println ("         `\"--(/\"`  ");
}

public void leftFish ()
{
    System.out.println ("      _,--,  ");
    System.out.println ("   .-'---./_      __  ");
    System.out.println ("  /o \\\\\    \"-.' /  ");
    System.out.println ("  \\  //    _.-'._\\  ");
    System.out.println ("   `\"\\\)--\"`  ");
}
```

```
public OneFishTwoFish ()
{
      System.out.println ("One Fish...\n");
      rightFish ();
      System.out.println ("\nTwo Fish...\n");
      leftFish ();
      System.out.println ("\nRed Fish...\n");
      rightFish ();
      System.out.println ("\nBlue Fish!\n");
      leftFish ();
}
```


OneFishTwoFish.java* - Ready to Program
File Edit Search Mark Run Help
Run Pause Open Save Indent Print Cut Copy Paste
public class OneFishTwoFish
{
public static void main (String args[])
{
new OneFishTwoFish ();
}
public OneFishTwoFish ()
{
System.out.println ("One Fish...\n");
System.out.println (" ,--,_ ");
System.out.println (" __ _\\.---'-. ");
System.out.println (" \\ '.-\" // o\\ ");
System.out.println (" /_.'-._ \\\\ / ");
System.out.println (" `\"--(/\"` ");
System.out.println ("\nTwo Fish...\n");
System.out.println (" _,--, ");
System.out.println (" .-'---./_ __ ");
System.out.println (" /o \\\\ \"-.' / ");
System.out.println (" \\ // _.-'._\\ ");
System.out.println (" `\"\\)--\"` ");
System.out.println ("\nRed Fish...\n");
System.out.println (" ,--,_ ");
System.out.println (" __ _\\.---'-. ");
System.out.println (" \\ '.-\" // o\\ ");
System.out.println (" /_.'-._ \\\\ / ");
System.out.println (" `\"--(/\"` ");
System.out.println ("\nBlue Fish!\n");
System.out.println (" _,--, ");
System.out.println (" .-'---./_ __ ");
System.out.println (" /o \\\\ \"-.' / ");
System.out.println (" \\ // _.-'._\\ ");
System.out.println (" `\"\\)--\"` ");
}
62 Columns by 35 Rows
Line 7 of 35
Col 1


OneFishTwoFish.java* - Ready to Program
File Edit Search Mark Run Help
Run Pause Open Save Indent Print Cut Copy Paste
public class OneFishTwoFish
{
public static void main (String args[])
{
new OneFishTwoFish ();
}
public OneFishTwoFish ()
{
System.out.println ("One Fish...\n");
rightFish ();
System.out.println ("\nTwo Fish...\n");
leftFish ();
System.out.println ("\nRed Fish...\n");
rightFish ();
System.out.println ("\nBlue Fish!\n");
leftFish ();
}
public void rightFish ()
{
System.out.println (" ,--,_ ");
System.out.println (" __ _\\.---'-. ");
System.out.println (" \\ '.-\" // o\\ ");
System.out.println (" /_.'-._ \\\\ / ");
System.out.println (" `\"--(/\"` ");
}
public void leftFish ()
{
System.out.println (" _,--, ");
System.out.println (" .-'---./_ __ ");
System.out.println (" /o \\\\ \"-.' / ");
System.out.println (" \\ // _.-'._\\ ");
System.out.println (" `\"\\)--\"` ");
}
62 Columns by 36 Rows
Line 7 of 37
Col 1

Method

- aka: a subprogram, a function, a procedure.
- A set of code which is separate from the rest of the program.
- It has a name and can be called (invoked) at any point in a program simply by using the method's name.
- It can receive information when called (or not) and return a value (or not).
- It has a method signature (The first line: `public void name ()`) which defines the major functions of the method.
- It's code is enclosed in { }.

When are they used in the PDLC?

- In the design phase, the code is divided into methods. Method signatures are also written then.
- In the code phase, each method is assigned to a programmer.
- Methods allow hundreds of programmers to work together easily. They break a big program into little pieces which can call each other.