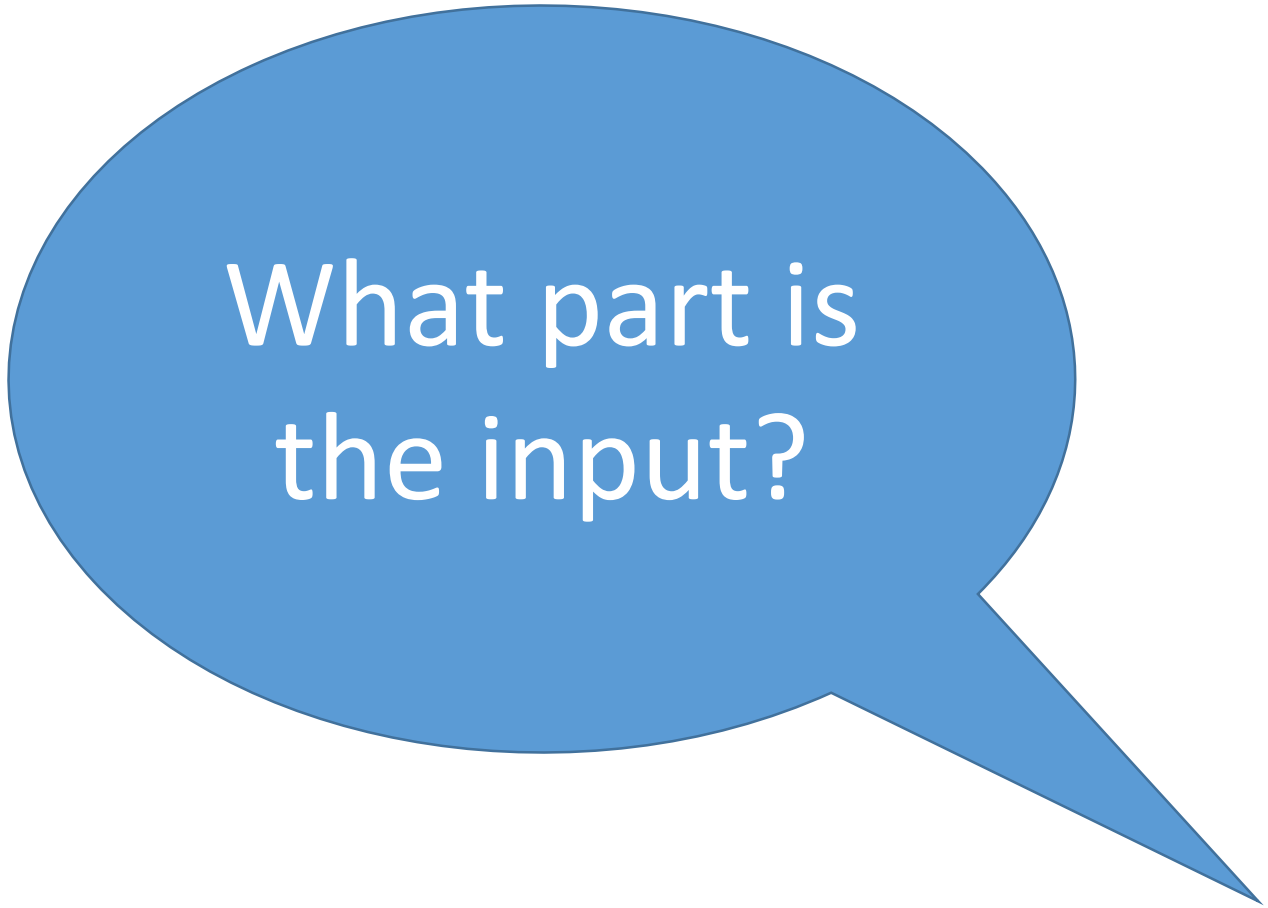
Some examples

Input and Output Code

What was your test mark? 78
What was the test total? 83

That was 93%
Good job!



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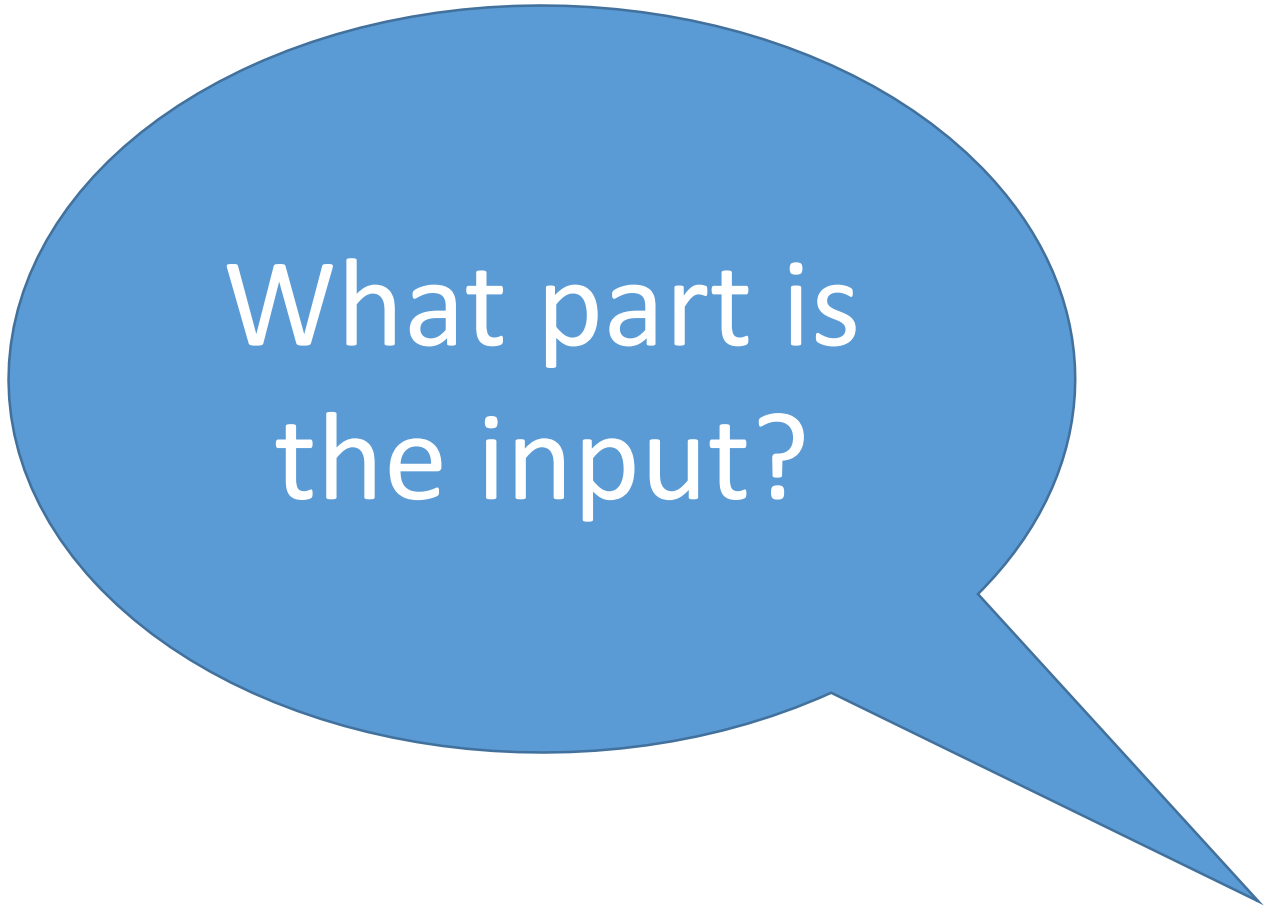

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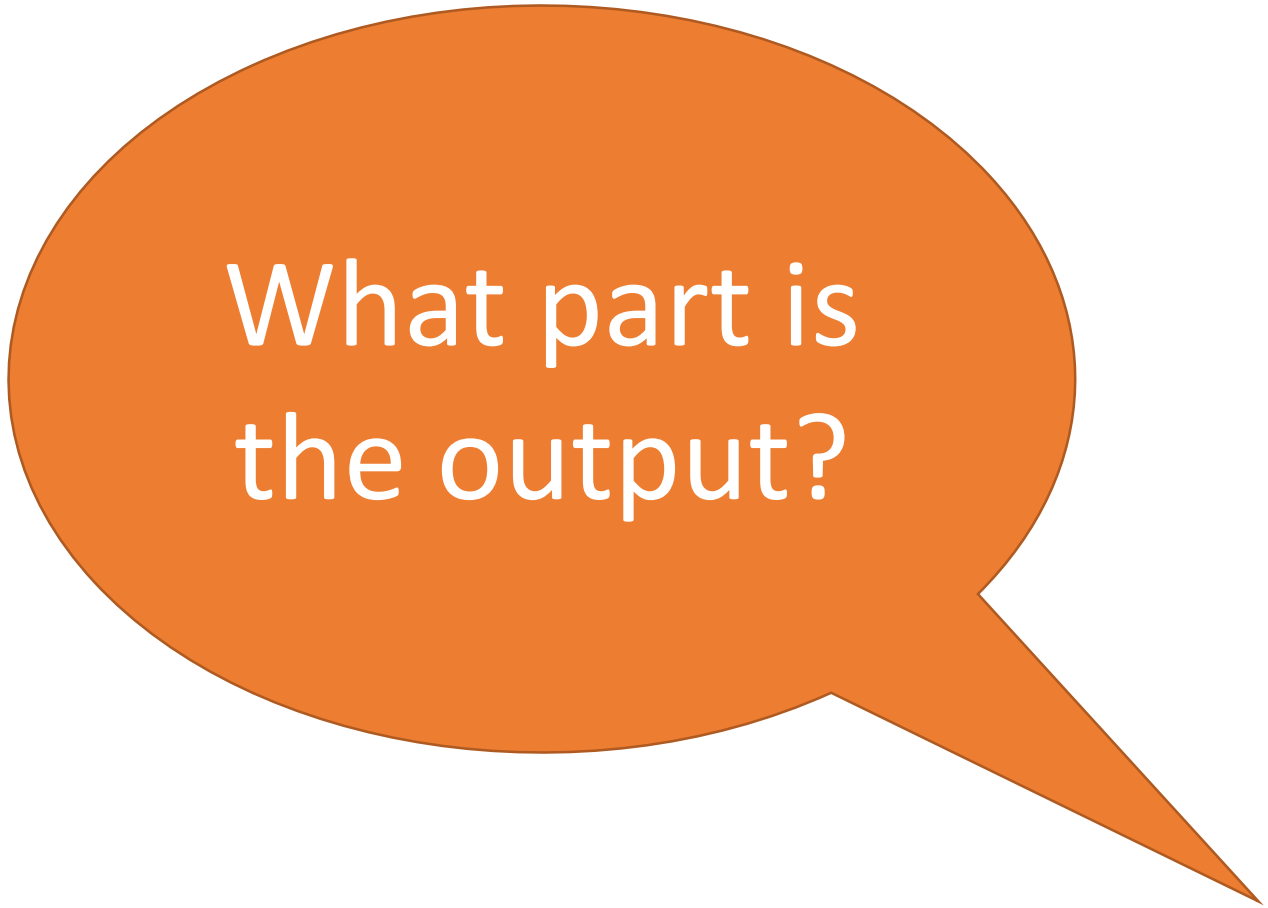

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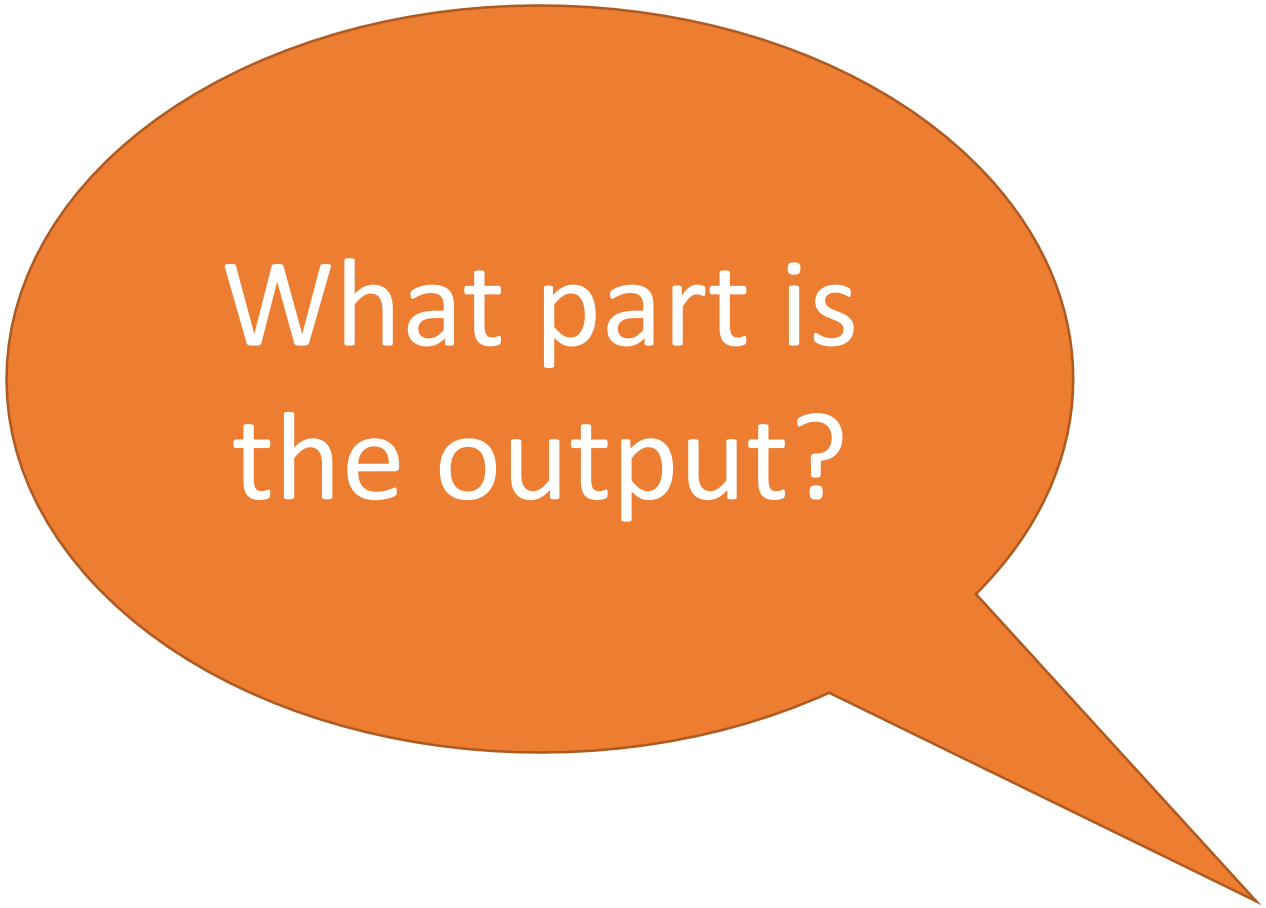

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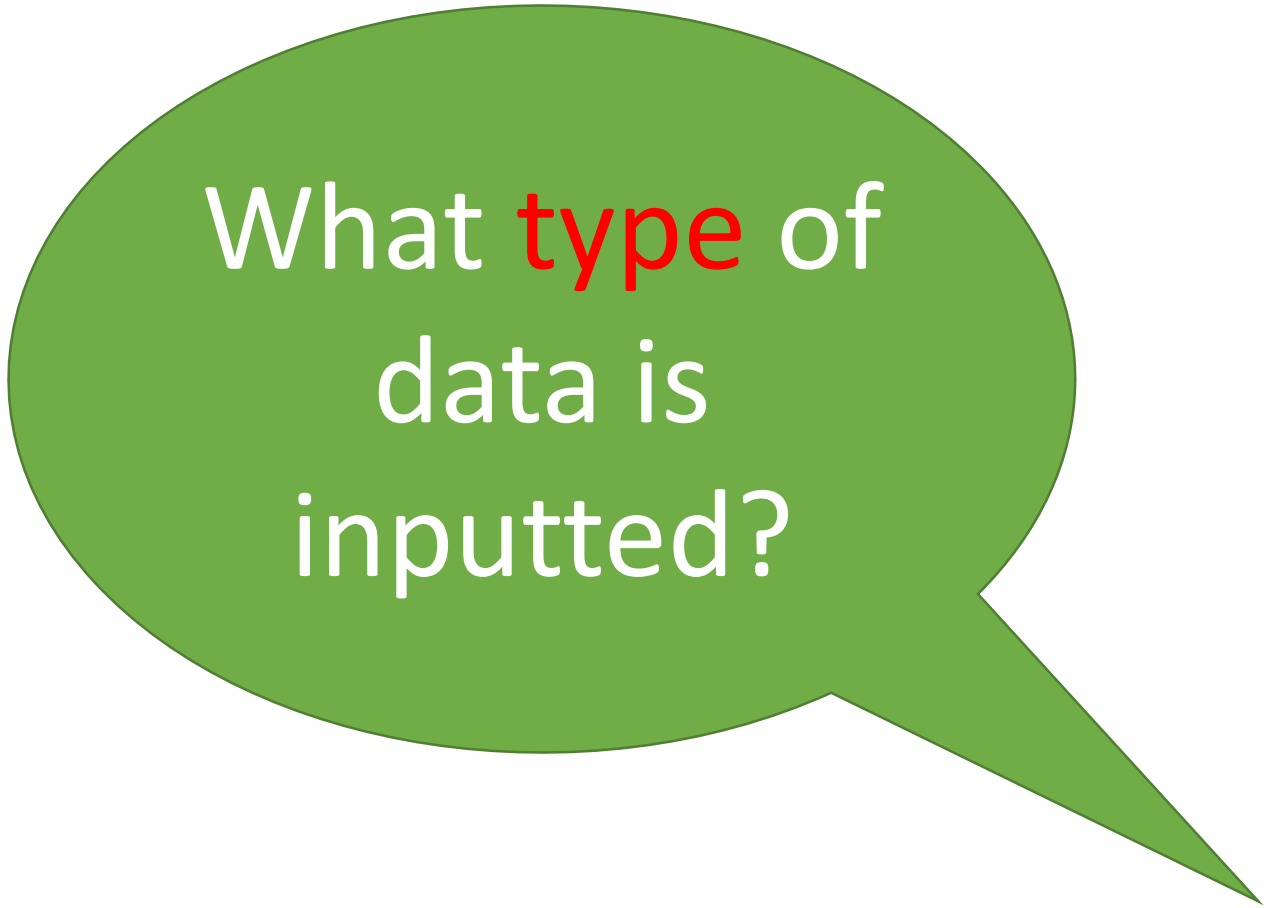

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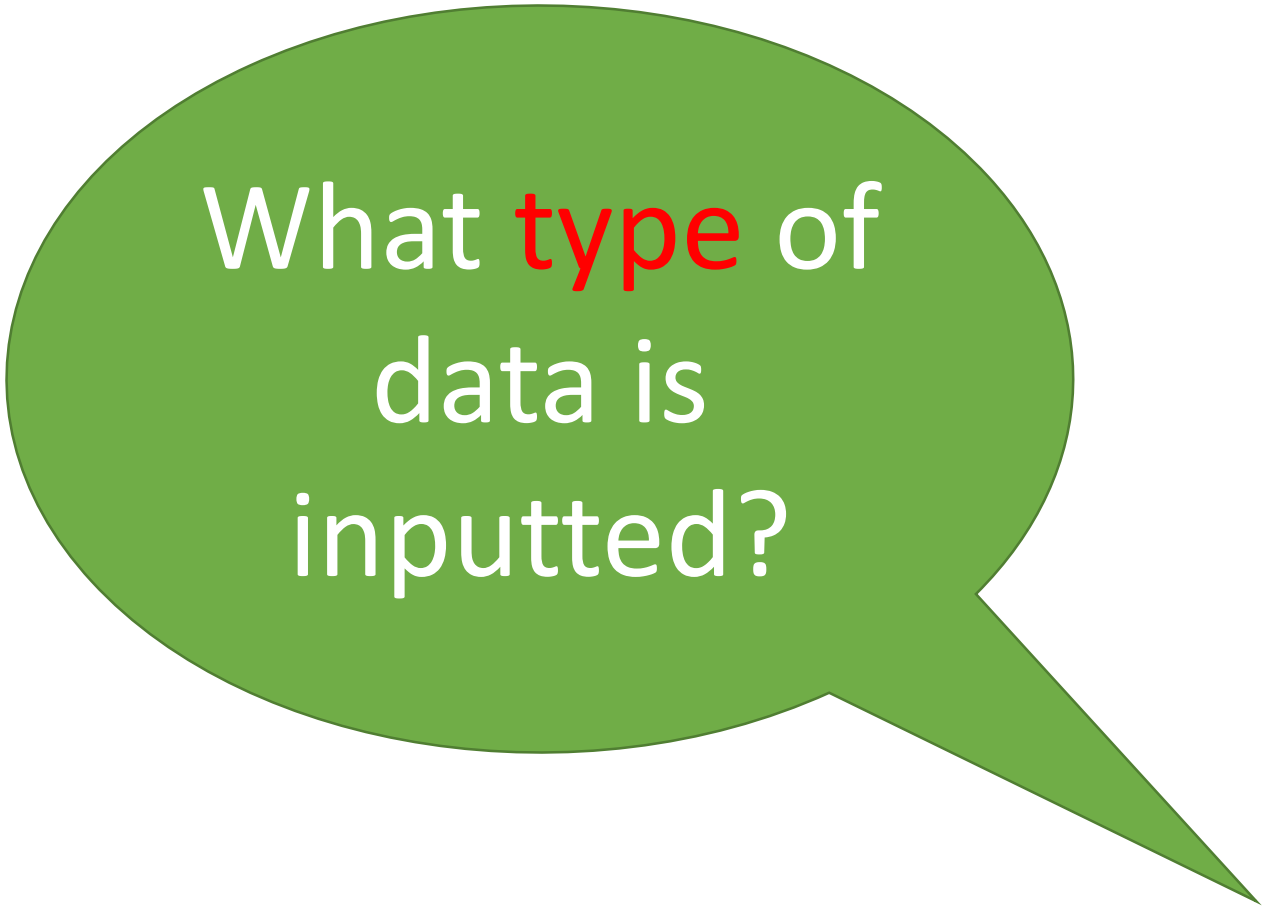

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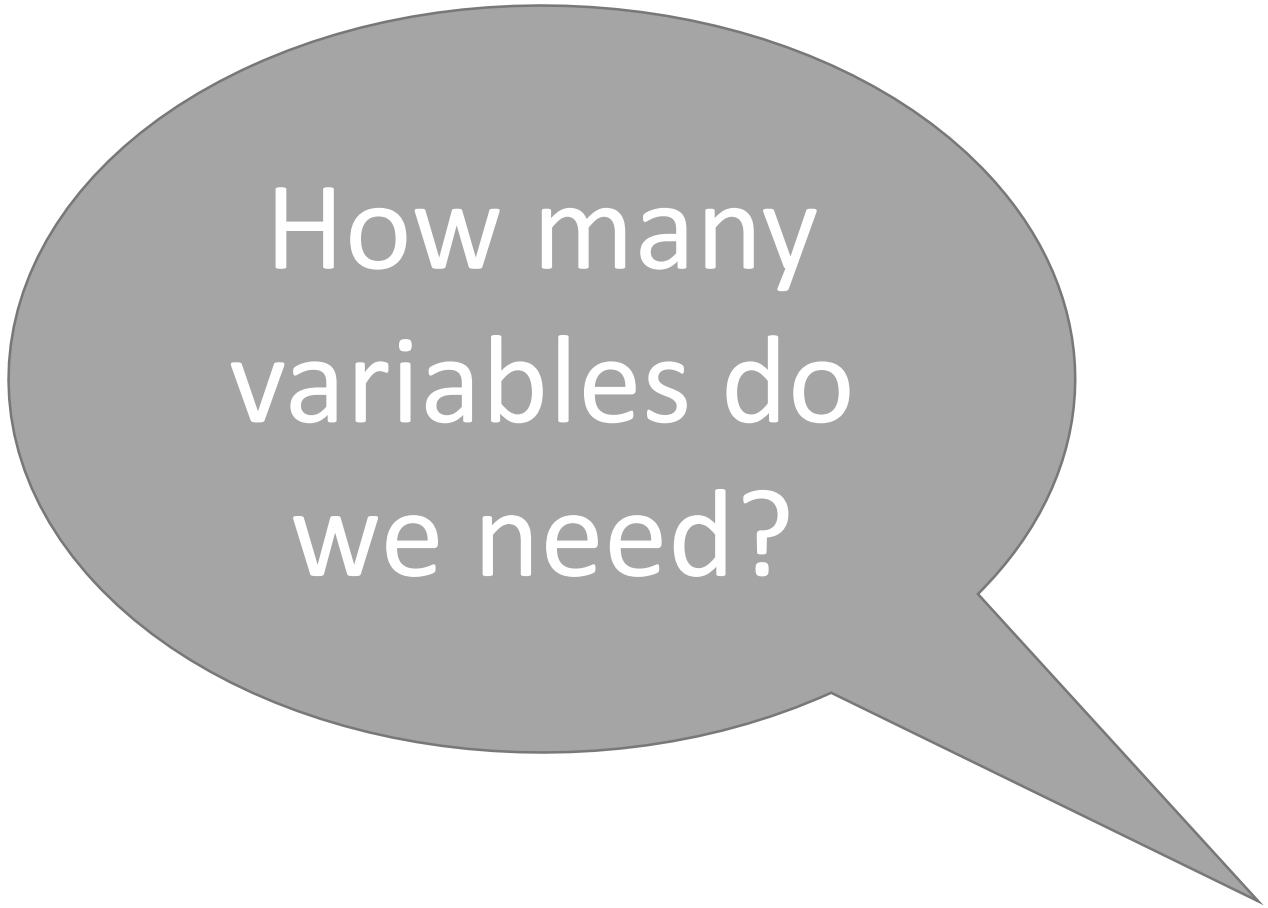

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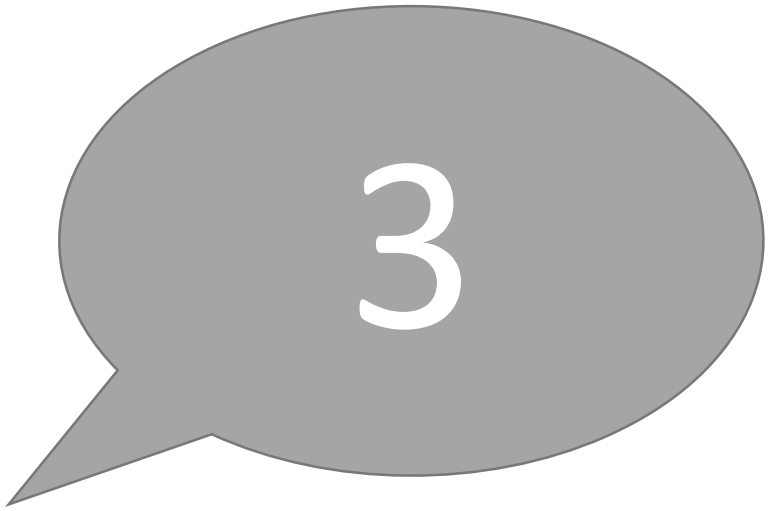

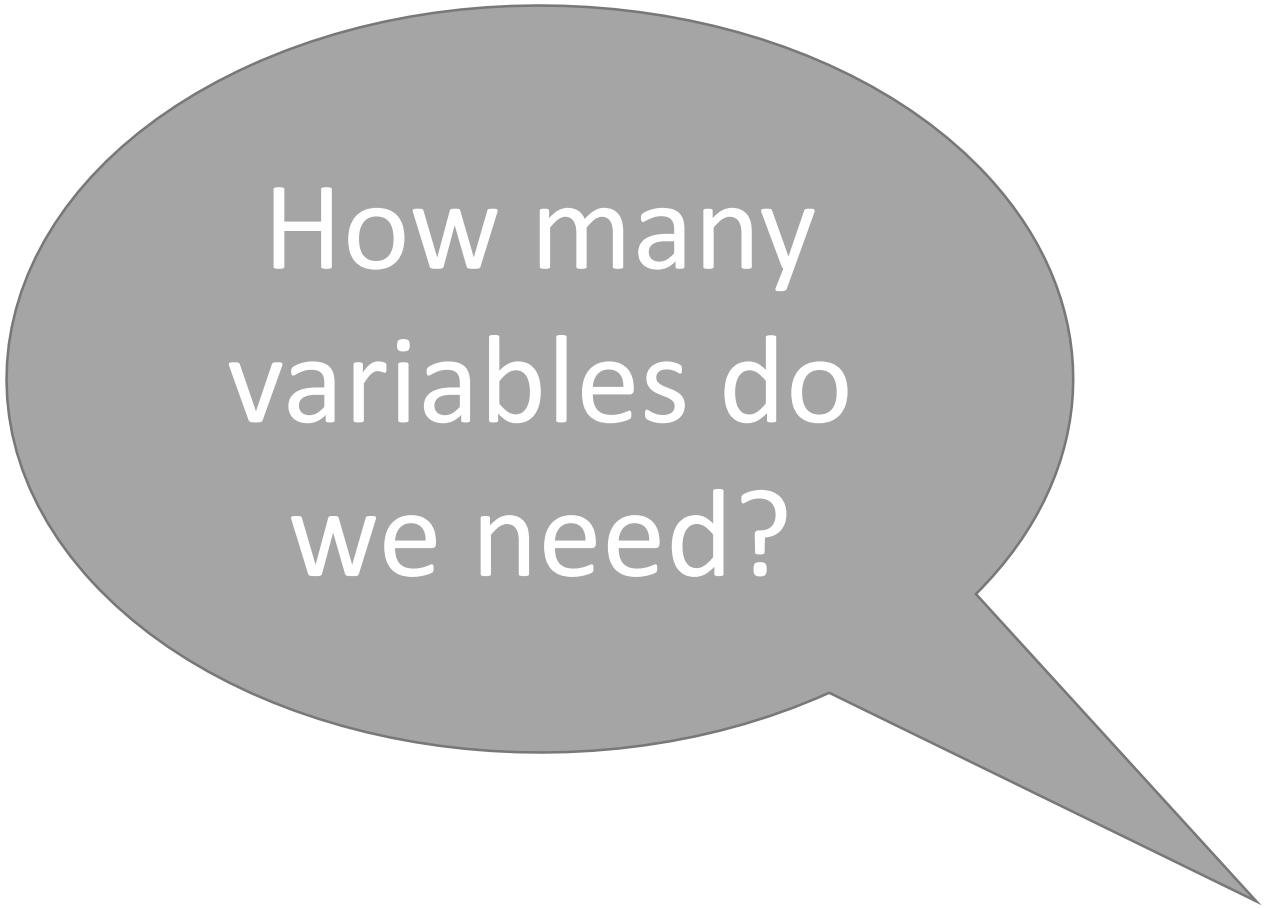

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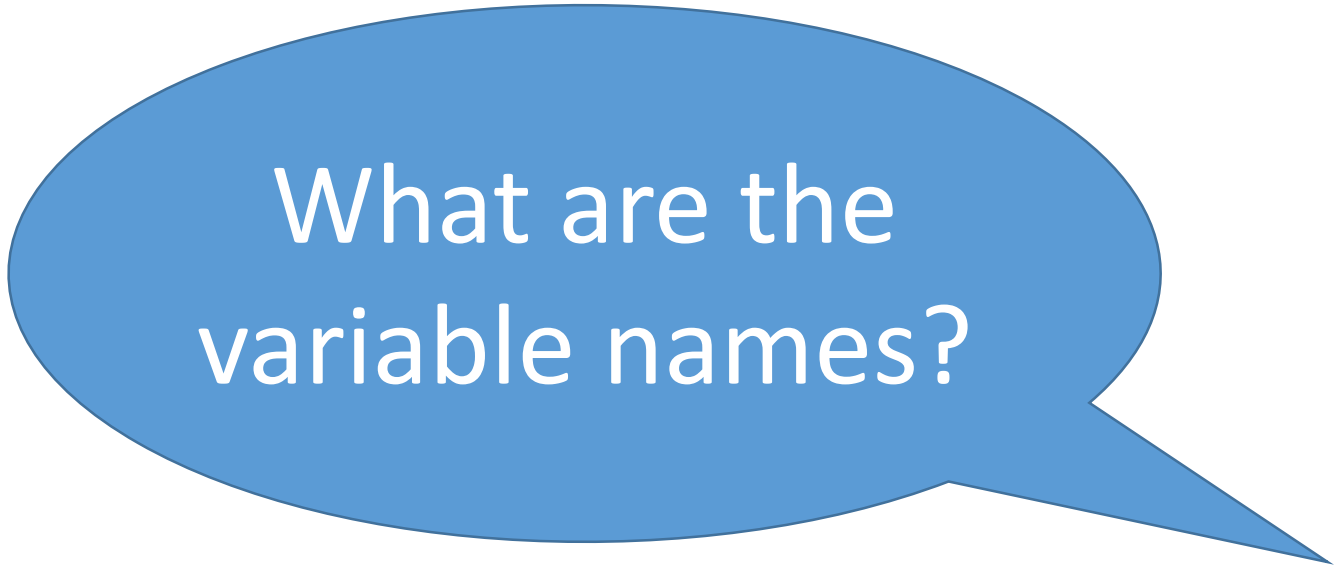


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int mark = IO.inputInt ("What was your test mark? ");
int total = IO.inputInt ("What was the test total? ");
int per = 100 * mark / total;
System.out.println ("\nThat was " + per + "%");
System.out.println ("Good job!");
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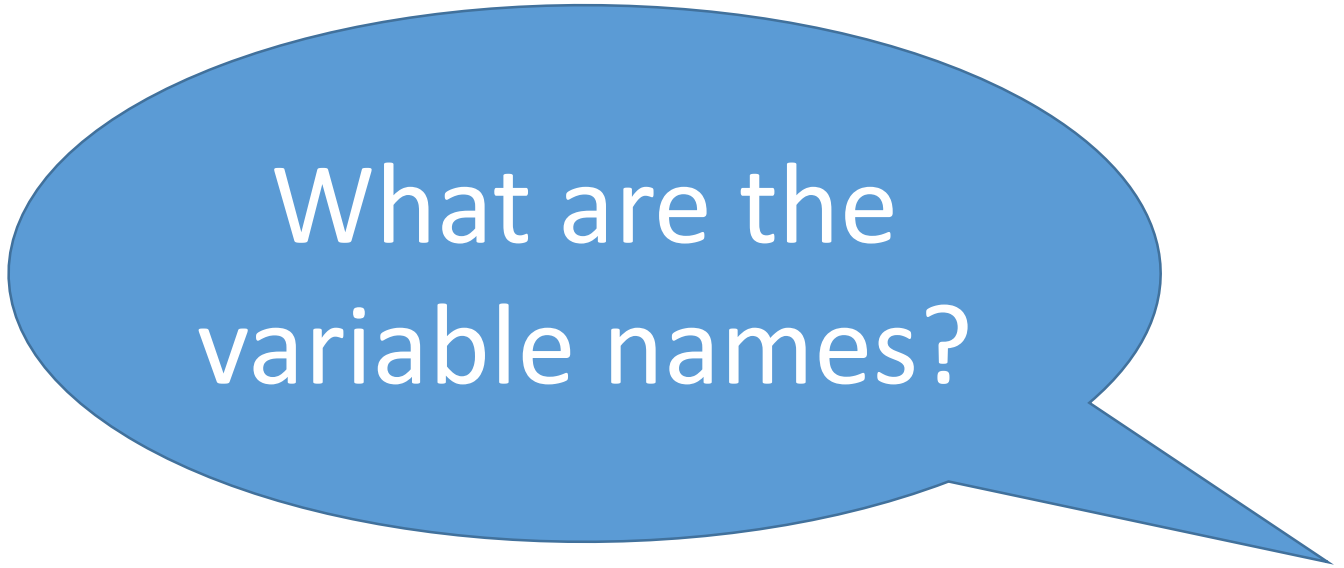


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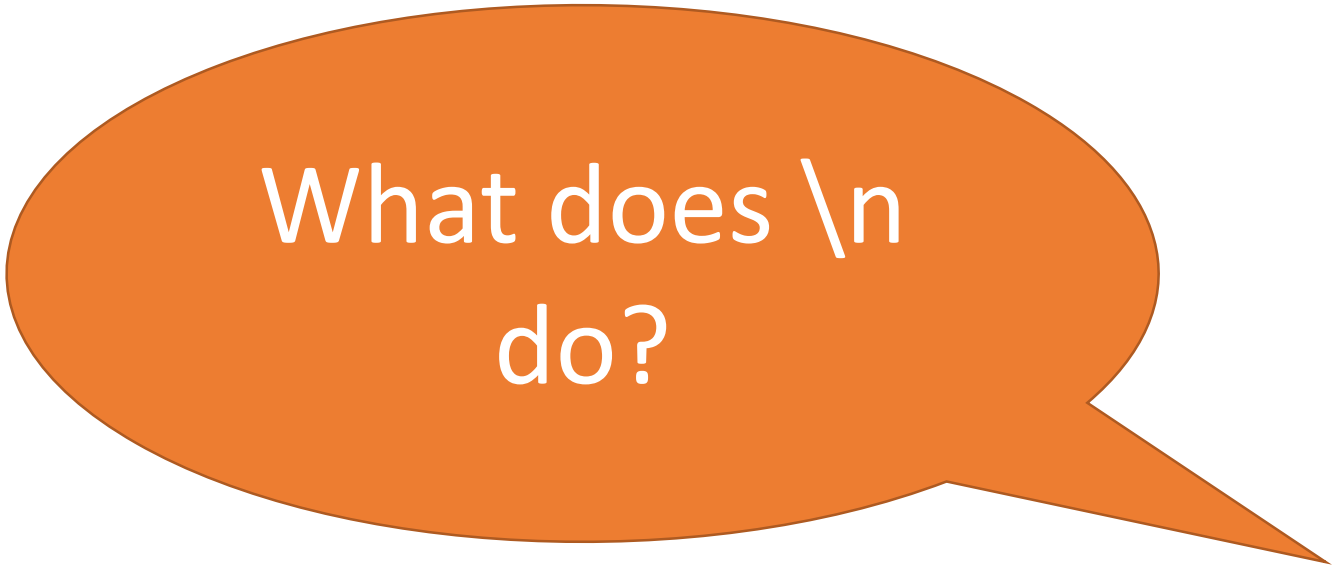


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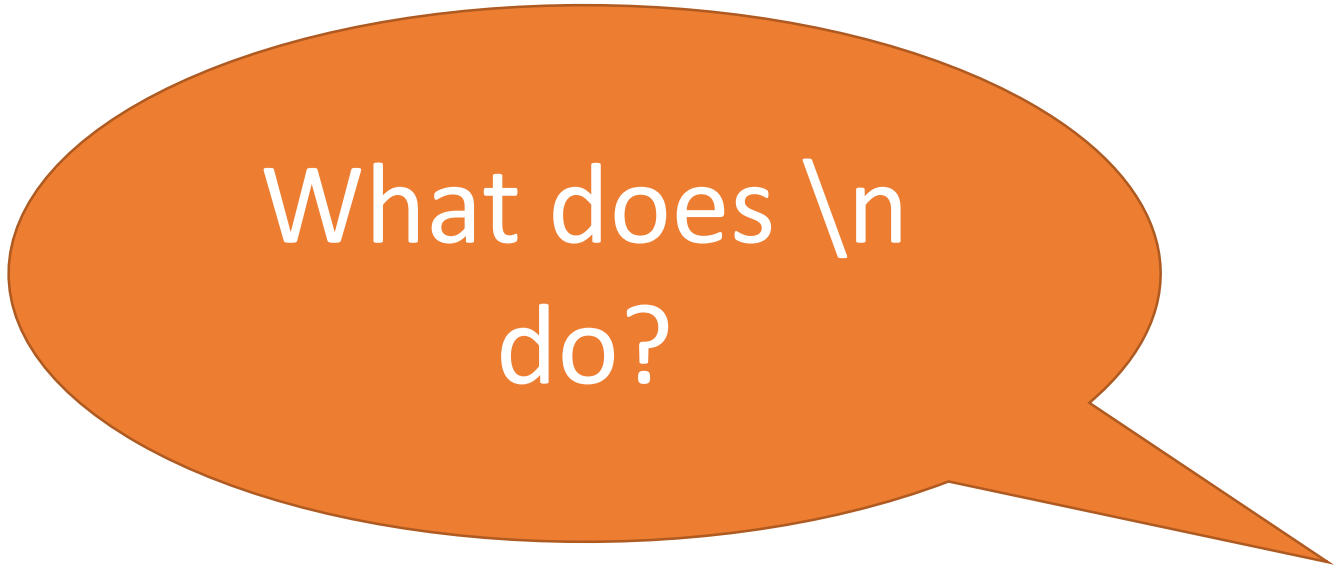


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Cylinder Surface Area and Volume

Height: 4.2
Radius: 3.4
Units: cm

The surface area is 99.0230004 cm^2
The volume is 152.530606517 cm^3

What types are each of the input variables?

Cylinder Surface Area and Volume

Height: 4.2 double
Radius: 3.4 double
Units: cm String

The surface area is 99.0230004 cm^2
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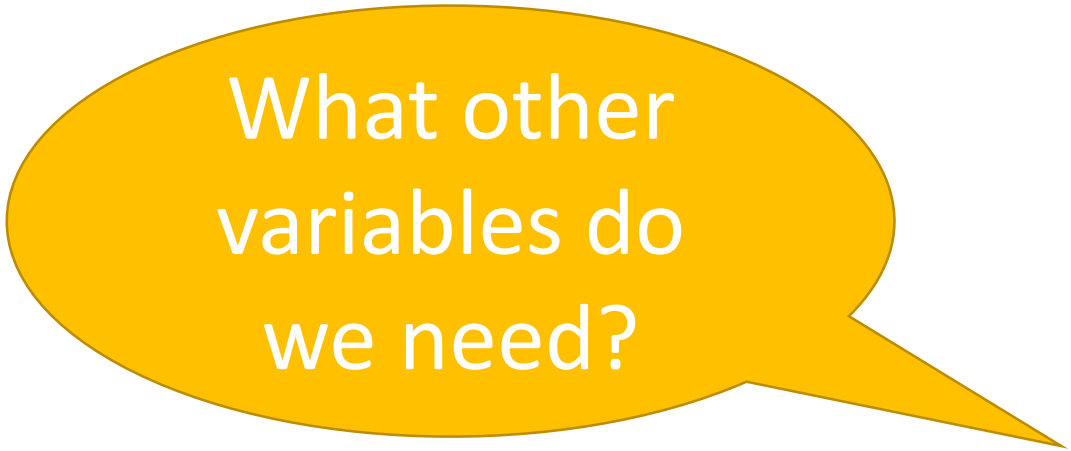

Cylinder Surface Area and Volume

Height: 4.2
Radius: 3.4
Units: cm

The surface area is 99.0230004 cm^2
The volume is 152.530606517 cm^3

One for the surface area and another one for the volume.

What other variables do we need?

```
Cylinder Surface Area and Volume

Height: 4.2
Radius: 3.4
Units: cm

The surface area is 99.0230004 cm^2
The volume is 152.530606517 cm^3
```

What's the code to find π?

```
System.out.println ("Cylinder Surface Area and Volume\n");
double h = IO.inputDouble ("Height: ");
double r = IO.inputDouble ("Radius: ");
String unit = IO.inputString ("Units: ");
double SA = 2 * Math.PI * r * r + 2 * Math.PI * h;
double V = Math.PI * r * r * h;
System.out.println ("\nThe surface area is " + SA + " " + unit + "^2");
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System.out.println ("The volume is " + V + " " + unit + "^3");
```

Math.PI

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

   public cylinder ()
   {
      System.out.println ("Cylinder Surface Area and Volume\n");
      double h = IO.inputDouble ("Height: ");
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}
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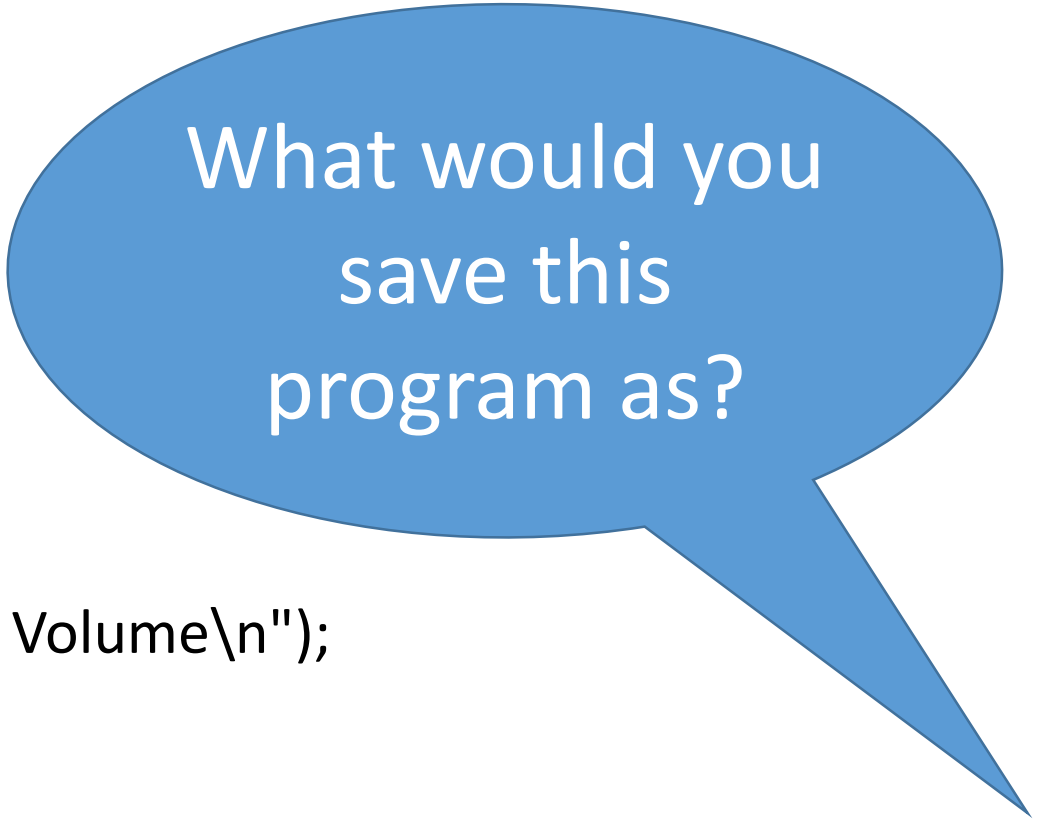

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      System.out.println ("\nThe surface area is " + SA + " " + unit + "^2");
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   }
}
```

What would you save this program as?

cylinder.java

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

   public cylinder ()
   {
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      double h = IO.inputDouble ("Height: ");
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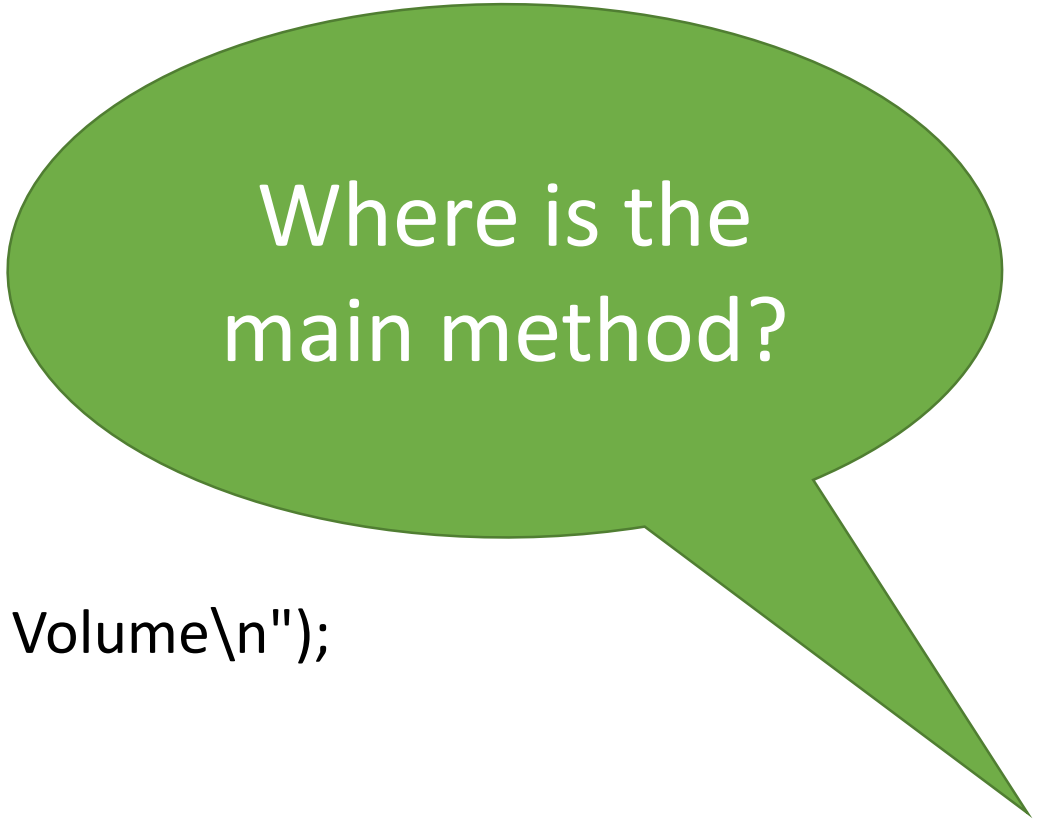
      double SA = 2 * Math.PI * r * r + 2 * Math.PI * h;
      double V = Math.PI * r * r * h;
      System.out.println ("\nThe surface area is " + SA + " " + unit + "^2");
      System.out.println ("The volume is " + V + " " + unit + "^3");
   }
}
```



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      System.out.println ("\nThe surface area is " + SA + " " + unit + "^2");
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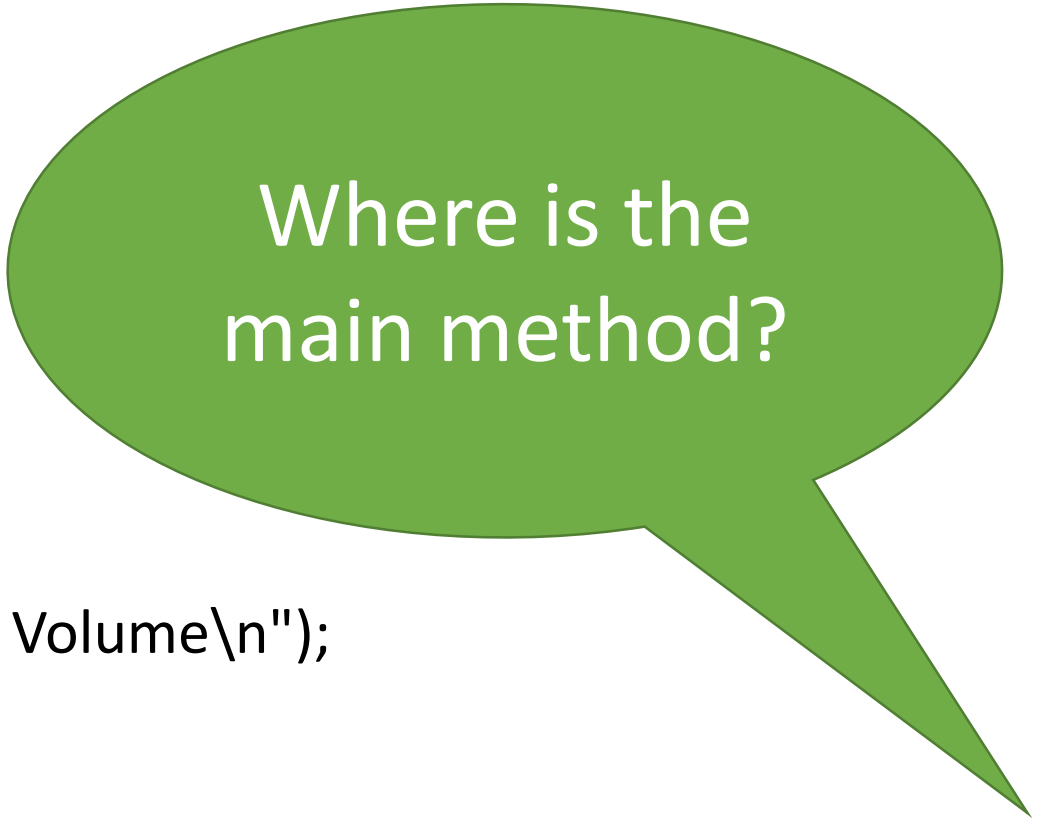
   }
}
```



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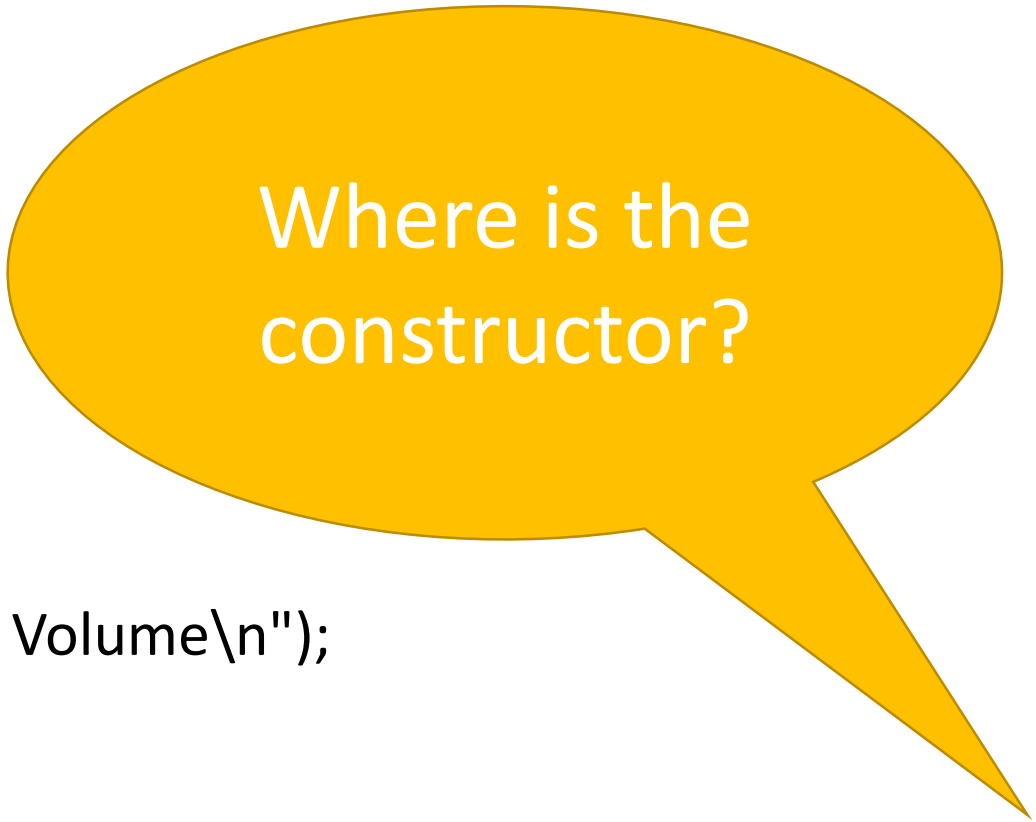

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Where is the constructor?

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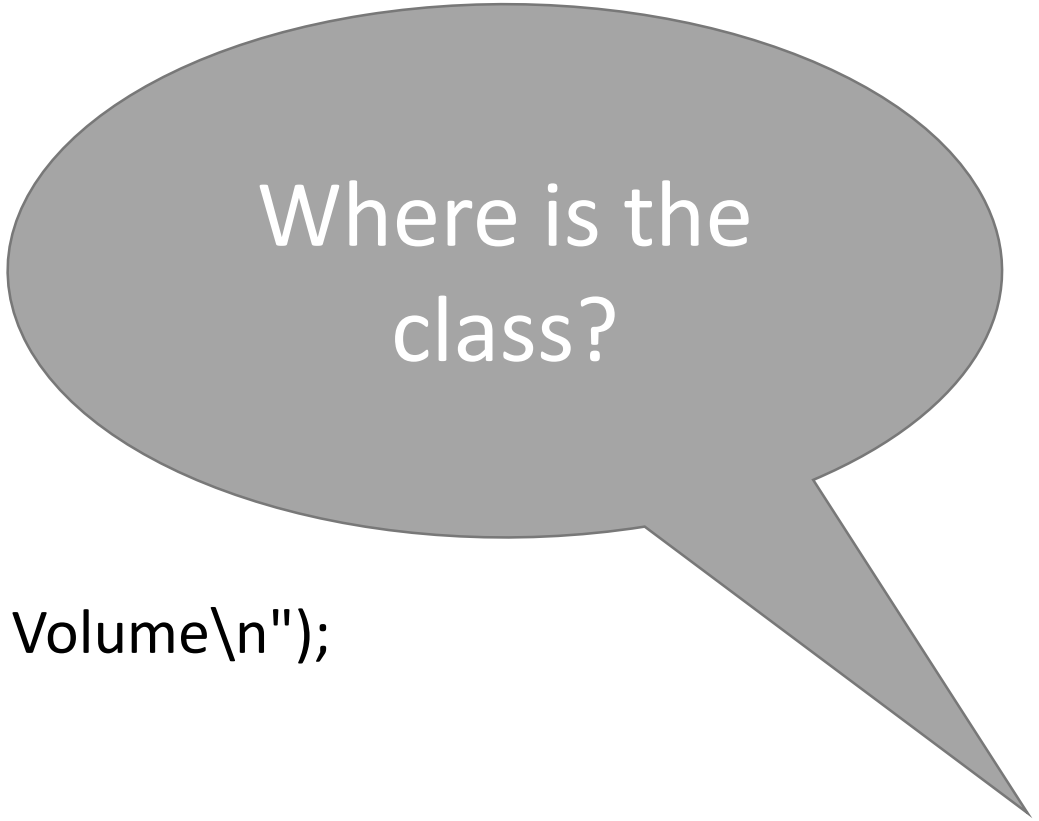

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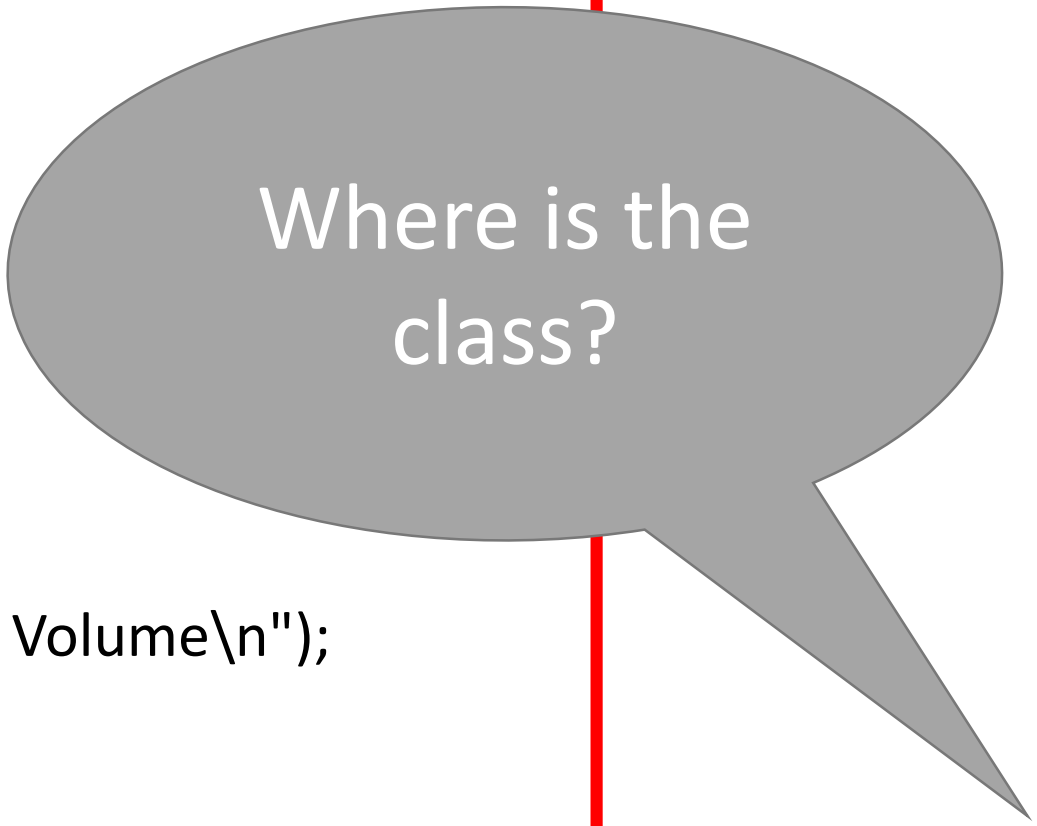

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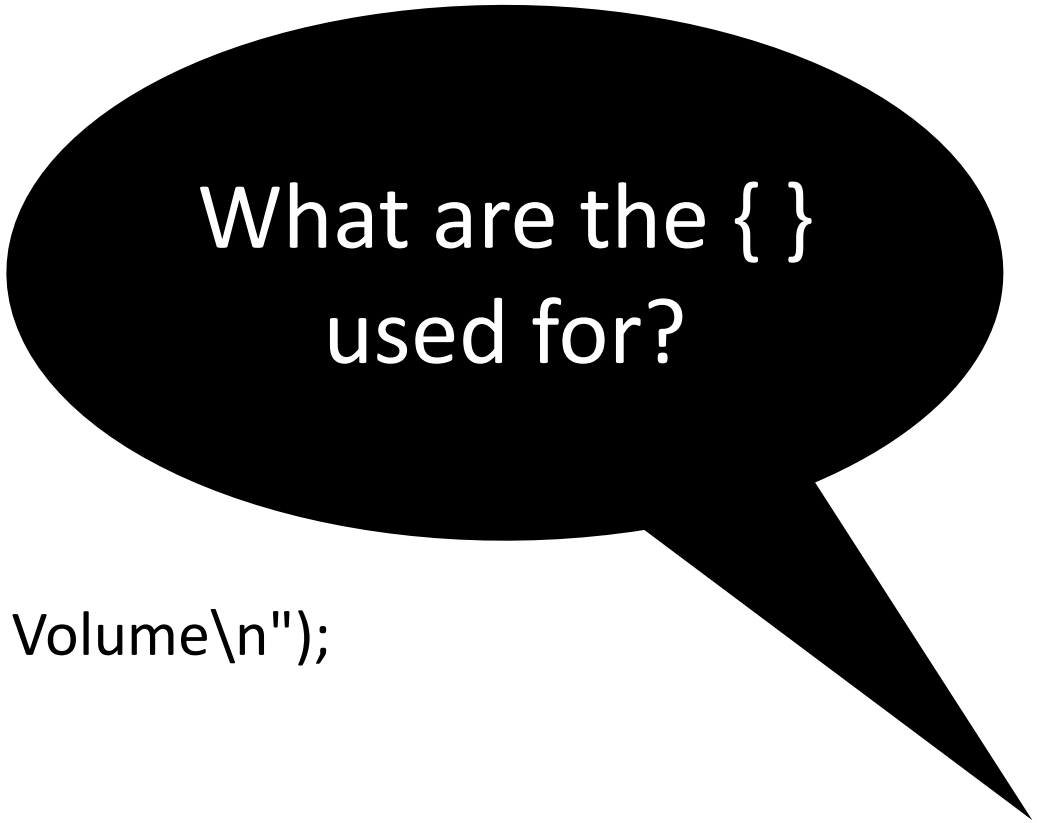

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   }
}
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What are the { } used for?

To define regions of code.