```
// Some useful data types

public class DataTypes
{
  public static void main(String [ ] args)
    {
       // integers are whole numbers up to 9 digits plus
       int i = -2147483648;
       System.out.println("i: " + i);

       // longs are integers in a wider range
       // long j = 64738295748374657;    // BlueJ compiler chokes on long constants
       // System.out.println("j: " + j);

       // floats are real numbers in a useful range
       // float f = 32.54;               // BlueJ compiler hates floats
       // System.out.println("f: " + f);

       // A double is a real number in a very wide range
       double d = -103.325;
       System.out.println("d: " + d);
       d = 658390872.23435674;
       System.out.println("d: " + d);   //  prints is scientific notation

       // Strings are words or phrases in double-quotes
       String s = "EMU was founded in 1849.";    // note the uppercase S in String
       System.out.println("s: " + s);

       // A char is a single character
       char c = 'A';                     // single quotes around single character
       System.out.println("'A': " + c);
       c = 65;                           // code for 'A' (codes are all >= 0)
       System.out.println("char for code value 65: " + c);

       // boolean type is for logic values, true and false
       //  (mainly used in logical tests such as in "if" statements)
       boolean b = true;
       System.out.println("b: " + b);   // you rarely print these

    }
}
```

```
============== Sample Run ========================

i: -2147483648
d: -103.325
d: 6.583908722343568E8
s: EMU was founded in 1849.
'A': A
char for code value 65: A
b: true
```