```java
import java.util.Scanner; // imports get the data to make objects

public class DayTwoInputOutputConditionals {

    public static void main(String[] args) {
        /*
         *    \ is a special character in Strings
         *    it is used to either call a special function or ignore a character
         *    \n  newline
         *    \t its a tab
         *    \" it will output the quote without ending the String
         *      example
         *          "She said,"Hello."" will break a normal string
         *          "She said,\"Hello.\"" will work just fine
         *      if you want a \ in a String use two.  "\\"  output one \
         */
        System.out.println("She said,\"Hello.\"");


        //Scanner tool used for getting input from the user
        Scanner textScanner = new Scanner(System.in);  //makes an instance of the scanner
        // ObjectName Variable = new ObjectName(params);

        System.out.println("What is your name?");
        String name = textScanner.nextLine();
        //String variable = use the scanner to get a string from the user

        System.out.println("Hello " + name + ".");

        System.out.println("Who is your best friend?");
        name = textScanner.nextLine(); // overwrite the previous value stored in the variable name.

        System.out.println(name + " is awesome!");

        //Conditionals - make choices

        System.out.println("What is your favorite color?");
        String color = textScanner.nextLine();

       if(color.equals("red")) { // if(something is true) { do this code }
           System.out.println("What an angry choice... Go Big Red");
       }
       else if(color.equals("yellow")) { // as many or few else if statements as you want. // they must follow an if
           System.out.println("Who chooses yellow? Do you like Iowa or something?");
       }
       else if(color.equals("yellow")) { // as many or few else if statements as you want. // they must follow an if
           System.out.println("Who chooses yellow? Do you like Iowa or something?");
       }
       else { // else catches anything that was not true above
           System.out.println(color + " is an interesting choice.");
       }

       String word = textScanner.nextLine().toLowerCase(); // a lowercase version of the string will be saved
       //booleans (data type that is either true or false
       /*
        *  Object.equals(Object)  compares two objects for exact equality
        *  String.equalsIgnoreCase(String)  compares two Strings for equality ignoring the case of the letters.
        *
        *  primitives
        *
        *   x == x   check for equality of two primitives
        *   x != x   checks for inequality of two primitives
        *   x < x
        *   x > x
        *   x <= x
        *   x >= x
        */
```

```
69          // Primitives
70              /*
71               * Are basic data types
72               *
73               * boolean  - either true or false     boolean choice = true;
74               * char is a single character   use single quotes  are 8 bits of data     char letter = 'a';
75               *
76               * Numbers
77               *
78               * byte  - a whole number between -128 and + 128  uses 8 bits of data    byte num = 5;
79               * short - a whole number between ~-32,000 and  ~+32,000 uses 16 bits of data   short num = 5;
80               * int  -  a whole number between ~2.8 billion and ~-2.8 billion   32 bits of data    int num = 5;
81               * long - a big whole number     64 bits of data    long num = 5;
82               *
83               * float - a small decimal    32 bits of data      float num = 5.1;
84               * double - a big decimal     64 bits of data      double num = 5.0;
85               */
86          //variable
87          int num = 5;
88          //dataType  variable = value ;
89          textScanner.next();
90          System.out.println("Type a number.");
91          int number = textScanner.nextInt();
92
93      }//Main
94
95  }//Class
96
```