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File: HourOfCode\_UserInteraction

Description:

Using a simple LED connected to the Arduino allow users to enter different blink rates to demonstrate interaction with the board.

Attach LED to pin 8 through a 220 ohm resistor and ground.

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// Global variables

int LED = 8; // LED is connected to pin 8

int onBoardLED = 13; // onBoard LED is on pin 13

int blinkRate; // create variable to hold blink rate entered

void setup() {

Serial.begin(9600); // turn on the serial port

pinMode(LED, OUTPUT); // set our LED pins as OUTPUT

pinMode(onBoardLED, OUTPUT);

digitalWrite(onBoardLED, LOW); // turn off the onBoard LED

// Prompt for inital input

Serial.println("Please enter a blink rate (1=Fast, 2=Average, 3=Slow): ");

while(Serial.available()==0){} // wait for input

blinkRate = Serial.parseInt(); // read the input

}

void loop() {

if(Serial.available()>0){ // look for input on serial port

blinkRate = Serial.parseInt(); // read the input

}

digitalWrite(LED, HIGH); // turn on the LED

if(blinkRate==1){delay(125);} // leave LED on for 1/8 sec

else if (blinkRate==2){delay(500);} // leave LED on for 1/2 sec

else {delay(1000);} // leave LED on for 1 sec

digitalWrite(LED, LOW); // turn off the LED

if(blinkRate==1){delay(125);} // leave LED off for 1/8 sec

else if (blinkRate==2){delay(500);} // leave LED off for 1/2 sec

else {delay(1000); } // leave LED off for 1 sec

}