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/*
  This program is to test Ultrasonic Sensor interfacing with Arduino

  Developed by: Team UTD - Hubli
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  Connect VCC of Ultrasonic Sensorsensor to +5V of Arduino board
  Connect GND of Ultrasonic SensorSensor to GND of Arduino board
  Connect Trig of Ultrasonic Sensorsensor to Digital pin 9 of Arduino
board
  Connect Echo Pin of Ultrasonic Sensorsensor to Digital pin 10 of
Arduino board

  Upload the code and check in Serial Monitor.
*/

#define trigPin 9      // Arduino Digital pin 9 is used for trigpin of
sensor
#define echoPin 10     // Arduino Digital pin 10 is used for echopin of
sensor

long duration;         // Variables for measuring duration and distance
                        from sensor
int distance;

void setup()
{
  pinMode(trigPin, OUTPUT); // Sets the trigPin as an Output in Arduino
  pinMode(echoPin, INPUT);  // Sets the echoPin as an Input in Arduino
  Serial.begin(9600);       // Starts the serial communication with
9600 buad rate
}

void loop()
{
  digitalWrite(trigPin, LOW); // Clears the trigPin
  delayMicroseconds(2);
  digitalWrite(trigPin, HIGH); // Sets the trigPin on HIGH state
for 10 micro seconds
  delayMicroseconds(10);
  digitalWrite(trigPin, LOW);
  duration = pulseIn(echoPin, HIGH); // Reads the echoPin, returns the
sound wave travel time in microseconds

  distance = duration * 0.034 / 2; // Calculating the distance
  Serial.print("Distance: ");      // Prints the distance on the Serial
Monitor
  Serial.print(distance);
  Serial.println("cm");
  delay(1000);
}

```