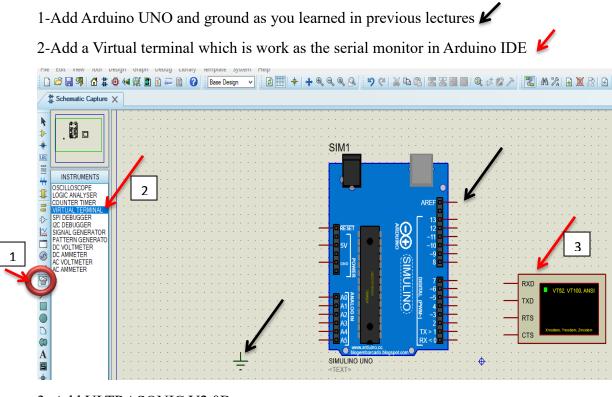


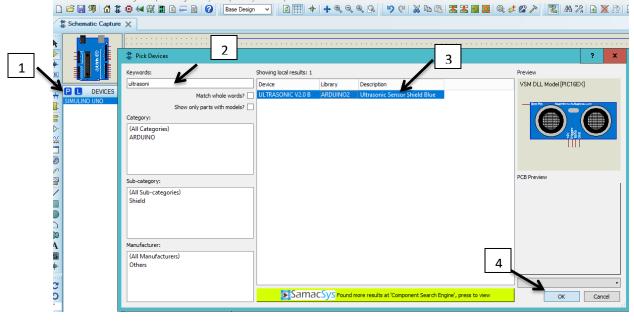
Microcontroler Design Laboratory Lecturer: DR. Shaymaa Akram Yousif



ULTRASONIC sensor with serial monitor



3- Add ULTRASONIC V2.0B sensor

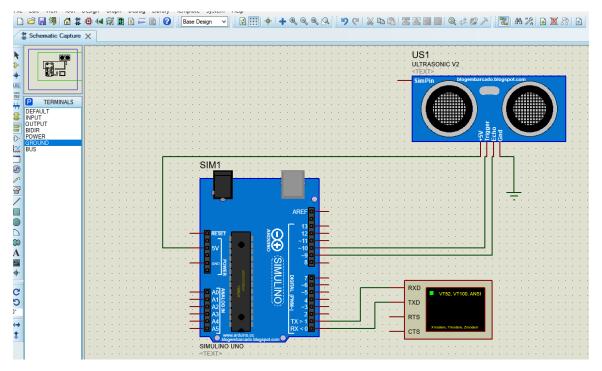




Microcontroler Design Laboratory Lecturer: DR. Shaymaa Akram Yousif



4- Connect the circuit as shown.



5-Press right-click on ULTRASONIC -> Edit Component

라 Edit Component			?	x	2
D + D (luca			Ľ	
Part <u>R</u> eference:	US1	Hidden:	OK		
Part <u>V</u> alue:	ULTRASONIC V2	Hidden:	Hidden Pins		
Element:	V New		Edit Firm	ware	
blogembarcado.blogspot.com:	(Default)	Hide All ∨	Cance	el	
UltraSonicSensor.HEX:		Hide All 🗸 🗸			
Advanced Properties:					
Initial contents of EEPROM 🗸		Hide All 🗸 🗸			
Other <u>P</u> roperties:					
Outer <u>r</u> openies.					
		_			
	7				
1		~			
Exclude from Simulation					
Exclude from PCB Layout Hide common pins					
Exclude from Current Variant					



Microcontroler Design Laboratory Lecturer: DR. Shaymaa Akram Yousif

{



6-upload the below code to your Arduino board by hex file

Code:-

const int trigPin = 10; const int echoPin = 9; long duration; int distance;

```
void setup()
{
pinMode(trigPin, OUTPUT);
pinMode(echoPin, INPUT);
Serial.begin(9600);
}
```

void loop()

digitalWrite(trigPin, LOW); delayMicroseconds(2); digitalWrite(trigPin, HIGH); delayMicroseconds(10); digitalWrite(trigPin, LOW); duration = pulseIn(echoPin, HIGH);

distance= duration*0.034/2; Serial.print("Distance: "); Serial.println(distance);

By:-Adian hussein Sannar Aamer }