LEGO

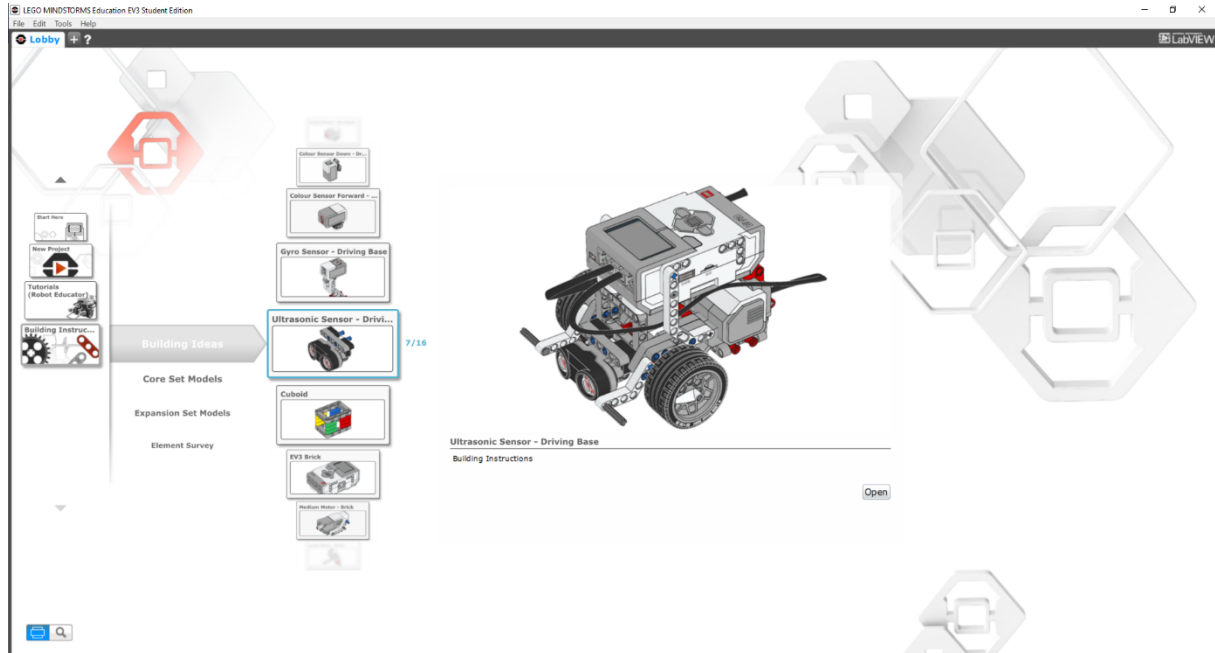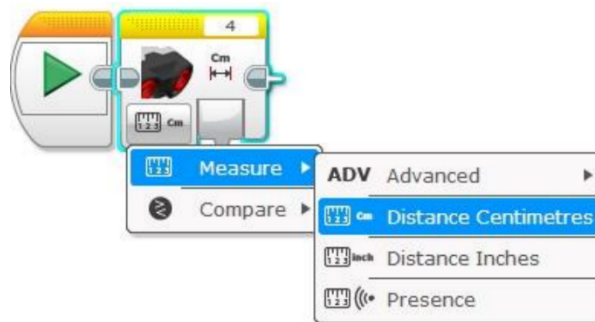**Use of Ultrasonic Sensor**

The installation of the ultrasonic sensor on the robot is done by following the steps in the program.

The ultrasonic sensor detects objects and measures distances using high-frequency sound waves. It can detect objects up to a maximum distance of 255 cm.

➢ In the Lego EV3 program, you can find the ultrasonic sensor block in the sensor tab. It is written on the top right of the port block where the sensor is connected on the brick.


The ultrasonic sensor basically has 2 menus: measure and compare.

By using the Measure (calculate) menu, the distance to the object in front of you can be determined in centimeters (distance centimeters) and distance in inches (distance inches). With the Presence option, it can be queried as a boolean value whether there is another ultrasonic sensor. It is used to measure distance in centimeters and inches in the Advanced menu.

➢ In the Lego EV3 program, the "Wait" block in the "Flow Control" tab allows certain commands to run until a specific event occurs.

In the application, the robot moves forward until it reaches a specified distance of 10 cm, and when the distance of 10 cm is reached, the robot stops.
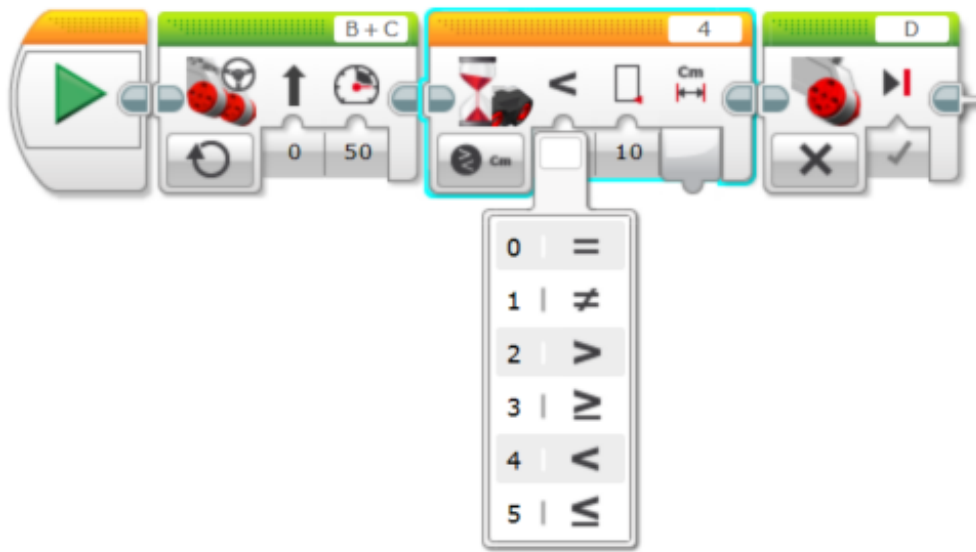
➢ In   the Lego EV3 program, the "Loop" block in the "Flow Control" tab allows commands to run a desired number of times until a specific event occurs.Uygulamada robot karşıda bulunan engele yaklaştıkça yavaşlayan ve engele 10 cm kaldığında durmaktadır.
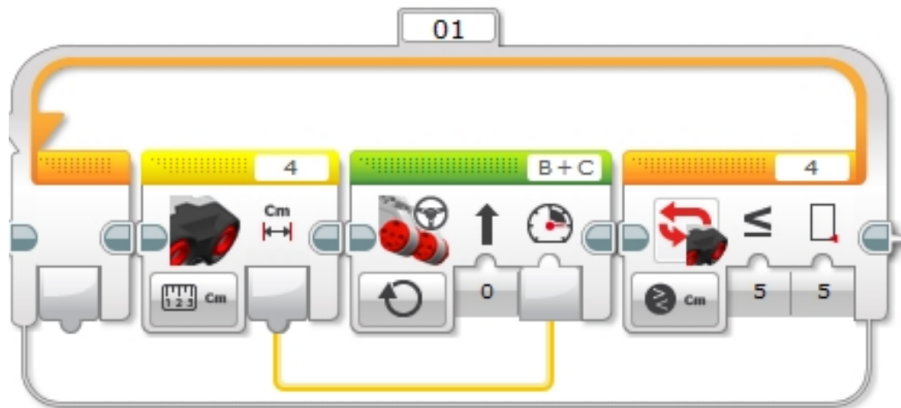
Various examples are created to reinforce the blocks.