***Step 1:*** set constant\_distance cd, transition\_distance td, critical\_value

***Step 2:*** turn on Ultrasonic sensor and measure distance

dist= getDistance();

***Step 3:***

**while**(flag!=**false**) {

dist= getDistance();

**if**(dist>*cd*+ *td*) {

**while**(dist>*cd*+ *td*) {

move the car forward;

dist= getDistance();

}

}

**else** **if** (*cd*+ *td* > dist &&dist>*cd*) {

**while**(*cd*+ *td* > dist && dist>*cd*) {

move the car forward slowly;

dist= getDistance();

}

}

**else** **if** (dist== *cd*) {

**while**(dist==*cd*) {

move the car forward in certain distance;

dist= getDistance();

}

}

**else** **if**(*cd*>dist && dist>*critical\_value*) {

**while**(*cd*>dist && dist>*critical\_value*) {

move the car forward very slowly;

dist= getDistance();

}

}

**else** **if**(dist<*critical\_value*) {

**while**(dist<*critical\_value*) {

stop the car and wait for next action;

dist= getDistance();

}

}

**if**(dist<.05) {flag=**false**;**break**;} // to avoid collision

}