int x;

int y;

int temp;

float v;

float v1;

float d = 1000.0;

float time;

//speed of the vehicle will be calculated using distance formula....

/\* distance = speed \* time

so speed = distance/time

formula to calculate speed is v = d/time

\*/

void setup()

{

pinMode(4,INPUT);

pinMode(5,INPUT);

digitalWrite(4,HIGH);

digitalWrite(5,HIGH);

Serial.begin(9600);

}

void loop()

{

x=digitalRead(4);

y=digitalRead(5);

if(x==HIGH && y==HIGH)

{

Serial.println("no vehicle crossing");

delay(10);

}

if(x==LOW)

{

y=digitalRead(5);

while(y==HIGH)

{

temp=temp+1;

Serial.println(temp);

delay(100);

y=digitalRead(5);

}

Serial.println("Out of loop");

time = temp\*0.1;

v = d/time;

v1=v\*3.6;

Serial.println("Time taken to cross is: ");

Serial.print(time);

Serial.print(" sec");

Serial.println("Speed of the vehicle crossed is:");

Serial.print(v);

Serial.print(" m/s");

Serial.println(" OR ");

Serial.println("Speed of the vehicle crossed is:");

Serial.print(v\*3.6);

Serial.print(" Km/hr");

delay(1000);

if(v1>70.0)

{

Serial.println(".....Warning......");

Serial.println("Speed Limit exceeded...");

v1=0.0;

}

delay(10000);

}

}