**CHAPTER 8:SYSTEM DESIGN**

**8.1 System Application Design:-**

**8.1.1 Pseudo Code:-**

**Module 1: Calculating Distance**

**-**This particular module is used measure the distance for allocating more time.

// Calculating the distance

distance= duration\*0.034/2;

// Prints the distance on the Serial Monitor

Serial.print("Distance(Ultrasonic): ");

Serial.println(distance);

**Module 2: Automatic Time Allocating Module**

- This module is used to automatically allocated time according to distance measured by ultrasonic sensors..

if(distance<=30 && distance2>30)

{

digitalWrite(led,HIGH);

digitalWrite(redled,LOW);

for(int i=1;i<=2;i++)

{

Serial.println(i);

digitalWrite(led2,LOW);

digitalWrite(redled2,HIGH);

delay(1000);

}

}

else if(distance2<=30)

{

digitalWrite(led,HIGH);

digitalWrite(redled,LOW);

for(int i=1;i<=5;i++)

{

Serial.println(i);

digitalWrite(led2,LOW);

digitalWrite(redled2,HIGH);

delay(1000);

}

}