

## Assignment -1

### Smart Waste Management

Assignment Date	19 September 2022
Student Name	Mr. MUKESH KUMAR R
Student Roll Number	910619106032
Maximum Marks	2 Marks

#### Question-1:

### HOME AUTOMATION :

#### INTERNET OF THINGS :

#### “ SMART WASTE MANAGEMENT SYSTEM ”

#### Coding :

```
// INTERNET OF THINGS
```

```
int t =3;
```

```
int e =2;
```

```
void setup()
```

```
{
```

```
  Serial.begin(9600);
```

```
  pinMode(t,OUTPUT);
```

```
  pinMode(e,INPUT);
```

```
  pinMode(13,OUTPUT);
```

```
  pinMode(4,INPUT);
```

```
  pinMode(12,OUTPUT);
```

```
}
```

```
void loop()
```

```
{
```

```
  // OBJECT DETECTION :
```

```
  digitalWrite(t,LOW);
```

```
  digitalWrite(t,HIGH);
```

```
  delayMicroseconds(10);
```

```
  digitalWrite(t,LOW);
```

```
  float dur=pulseIn(e,HIGH);
```

```
float dis=(dur*0.0343)/2;
Serial.print("Distance :");
Serial.println(dis);
// TEMPERATURE SENSING :
```

```
double a = analogRead(A0);
double c = (((a/1024)*5)-0.5)*100;
Serial.print("Temp :");
Serial.println(c);
delay(2000);
```

```
// MOTION DETECTOR
```

```
int p = digitalRead(4);
Serial.println(p);
if(p)
Serial.println("Motion Detected");
delay(1000);
```

```
// BUZZER
```

```
for(int i=0;i<=30000;i=i+10)
{
tone(12,i);
delay(1000);
noTone(12);
delay(1000);
}
```

```
}
```

```
// BY MUKESH KUMAR R
```

