

## ASSIGNMENT-01

### IOT ENABLED CODING

ASSIGNMENT NUMBER	01
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**WRITE A CODE TO AUTOMATE THE HOME USING VARIOUS SENSORS**

#### **PROGRAM**

```
int flexSensor = A2;
```

```
int buzzer = 6;
```

```
int lights = 5;
```

```
void setup()
```

```
{
```

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

```
  pinMode(flexSensor, INPUT);
```

```
  pinMode(buzzer, OUTPUT);
```

```
  pinMode(lights, OUTPUT);
```

```
}
```

```
void loop()
```

```
{
```

```
  bool door = checkDoor(); // true if door is open
```

```
  doorAction(door);
```

```
}
```

```
bool checkDoor()
```

```
{
```

```
  if(map(analogRead(flexSensor),100,1000,0,1000)>500)
```

```
{  
    // door closed  
    return(false);  
}  
else  
{  
    return(true);  
}  
}  
  
void doorAction(bool door)  
{  
    if(door)  
    {  
        // if door is opened, buzzer rings for 1 sec and lights are turned on for a total of 5 secs  
        digitalWrite(buzzer,HIGH);  
        digitalWrite(lights,HIGH);  
        delay(1000);  
        digitalWrite(buzzer,LOW);  
        delay(4000);  
        digitalWrite(lights,LOW);  
    }  
}
```

