



Code:

```
void setup()
```

```
{
```

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

```
  pinMode(8, OUTPUT);
```

```
  pinMode(A0, INPUT);
```

```
  pinMode(2, OUTPUT);
```

```
  pinMode(7, INPUT);
```

```
  pinMode(4, OUTPUT);
```

```
}
```

```
void loop()
```

```
{
```

```
  if (digitalRead(7) == 1) {
```

```
    tone(4, 523, 1000); // play tone 60 (C5 = 523 Hz)
```

```
  } else {
```

```
    noTone(4);
```

```
}
```

```
delay(10); // Delay a little bit to improve simulation performance
```

```
int temp = analogRead(A0);
```

```
if (temp>50)
```

```
{
```

```
tone(8, 1000);
```

```
digitalWrite(2, HIGH);
```

```
delay(2000);
```

```
}
```

```
else
```

```
{
```

```
noTone(8);
```

```
digitalWrite(2,LOW);
```

```
delay(2000);
```

```
}
```

```
}
```