TITLE : **PREVENTING THEFT IN RATION GOODS USING RFID TAG USING IOT TECHNOLOGY**

SAMPLE CODE:

```
 #include <LiquidCrystal.h>
LiquidCrystal lcd(13, 12, 11, 10, 9, 8); String s;
String e = "870080C705C5"; // 5
String d = "870084FCB946"; // 4
String c = "870085215A79"; // 3
String b = "870085FFA65B"; // 2
String a = "87009073ED89"; // 1
int no1 = 0, no2 = 0, no3 = 0, no4 = 0, no5 = 0;
int k1 = 0; // Total stock count
void setup()
{
Serial.begin(9600);
lcd.begin(16, 2);
pinMode(2, OUTPUT);
pinMode(3, OUTPUT);
lcd.setCursor(0, 0);
 lcd.print(" Smart Ration ");
lcd.setCursor(0, 1);
```

```
lcd.print(" Using IoT        ");
delay(2000);
lcd.clear();
}
void loop()
{
if (Serial.available())
{
s = Serial.readString();
lcd.clear(); // Clear screen before printing new text
// Serial.print('N’)
// Serial.print(no1);
if (s == a)
{
if (no1 == 0)
{
no1++; k1++;
lcd.setCursor(0, 0);
lcd.print("Added Item 1");
Serial.print('A');
}
```

```
else
{
no1--;
k1 = max(0, k1 - 1);
lcd.setCursor(0, 0);
lcd.print("Distbution 1 Item ");
Serial.print('a');
}
}
 else if (s == b)
{
if (no2 == 0)
{
no2++; k1++;
lcd.setCursor(0, 0);
 lcd.print("Added Item 2");
Serial.print('B');
}
else
{
no2--;
```

```
k1 = max(0, k1 - 1);
 lcd.setCursor(0, 0);
lcd.print("Distbution 2 Item");
Serial.print('b');
}
}
else if (s == c)
{
if (no3 == 0)
{
no3++; k1++;
lcd.setCursor(0, 0);
lcd.print("Added Item 3");
Serial.print('C');
}
else
{
no3--;
k1 = max(0, k1 - 1);
lcd.setCursor(0, 0);
lcd.print("Distbution 3 Item");
```

```
Serial.print('c');
}
}
else if (s == d)
{
if (no4 == 0)
{
no4++; k1++;
lcd.setCursor(0, 0);
lcd.print("Added Item 4");
Serial.print('D');
}
else
{
no4--;
k1 = max(0, k1 - 1);
lcd.setCursor(0, 0);
lcd.print("Distbution 4 Item ");
Serial.print('d');
}
}
```

```
else if (s == e)
{
if (no5 == 0)
{
no5++; k1++;
lcd.setCursor(0, 0);
lcd.print("Added Item 5");
Serial.print('E');
}
else
{
no5--;
k1 = max(0, k1 - 1);
 lcd.setCursor(0, 0);
lcd.print("Distbution 5 Item");
Serial.print('e');
}
}
lcd.setCursor(0,1);
lcd.print("Total: "); lcd.print(k1); Serial.print('K');
Serial.print(k1);
```

```
// Serial.print(k1);
}
//email divyalithisha20@gmail.com.
//Your username is smart_ration.
//Projectiot@2025
// Code generated by Arduino IoT Cloud, DO NOT EDIT.
#include <ArduinoIoTCloud.h>
#include <Arduino_ConnectionHandler.h>
const char DEVICE_LOGIN_NAME[] = "5249c26a-5e44-431f-9d98-d0c436e831b0";
const char SSID[]               = "projectiot";   // Network SSID (name)
const char PASS[]               = "123456789"; // Network password (use for WPA, or use as key for WEP) const char DEVICE_KEY[] = "7de0addmnPR1pCuWNK1Iel@Pl";
// Secret device password
void      onStatusChange();
void onCountChange();
String status;
int count;
unsigned long lastUpdateTime =0;
const unsigned long updateInterval = 1000; // 1 second
void init Properties()
```

```
{
ArduinoCloud.setBoardId(DEVICE_LOGIN_NAME);
ArduinoCloud.setSecretDeviceKey(DEVICE_KEY);
ArduinoCloud.addProperty(status, READWRITE, ON_CHANGE,
onStatusChange);


ArduinoCloud.addProperty(count, READWRITE, ON_CHANGE,
onCountChange);
}
WiF iConnection Handler Arduino Iot Preferred
Connection(SSID,PASS)
void setup()
{
Serial.begin(9600);
initProperties();
ArduinoCloud.begin( ArduinoIoTPreferred Connection);
setDebugMessageLev el(2); // Enable Debug Messages
ArduinoCloud.printDebugInfo();
}
void loop() {
unsigned long currentMillis = millis();
// Update cloud at set intervals
```

```
if (currentMillis - lastUpdateTime >= updateInterval)
{
ArduinoCloud.update();
lastUpdateTime = currentMillis;
}
// Handle Serial Input and Update Variables if (Serial.available() >0) {
char identifier = Serial.read();
switch (identifier)
{
case 'K': count = Serial.parseInt(); break;
case 'A': status = "Item 1 Added"; break;
case 'a': status = "Item 1 Distributed"; break;
case 'B': status = "Item 2 Added"; break;
case 'b': status = "Item 2 Distributed"; break;
case 'C': status = "Item 3 Added"; break;
case 'c': status = "Item 3 Distributed"; break;
case 'D': status = "Item 4 Added"; break;
case 'd': status = "Item 4 Distributed"; break;
case 'E': status = "Item 5 Added"; break;
case 'e': status = "Item 5 Distributed"; break;
```

```
}
}
}
void onCountChange()
{
Serial.println("Status changed to: " + String(count));
}
 void onStatusChange()
{
Serial.println("Status changed to: " + String(status));
}
```