DCS
Power To Design The Desired

CENTRE FOR SKILL AND ENTREPRENEURSHIP DEVELOPMENT

TOPIC – RFID - INTERFACING WITH ARDUINO

IIOT - 3

TECHNOLOGY PARTNER

DASSAULT SYSTEMES ptc Mastercam

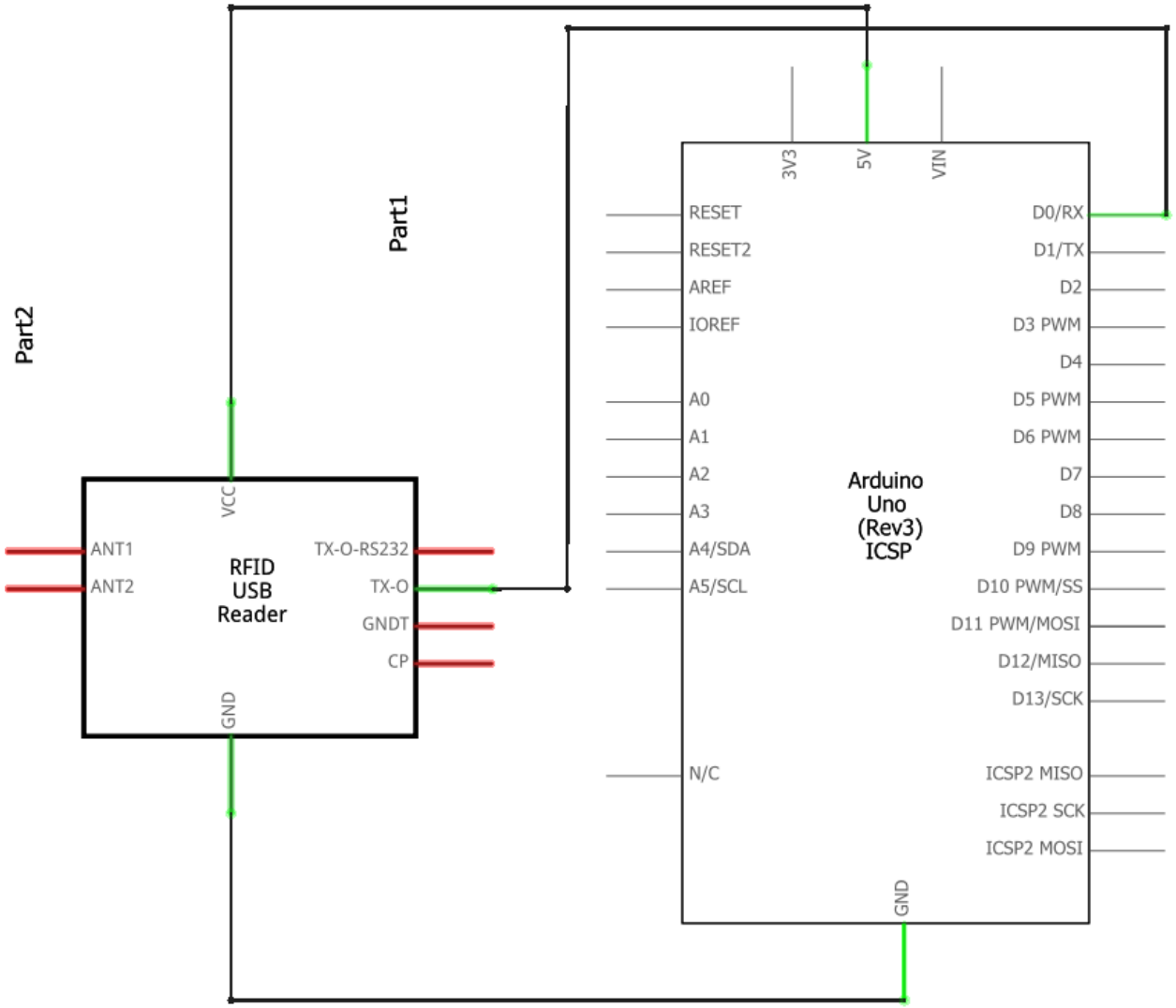
RFID - RADIO FREQUENCY IDENTIFICATION

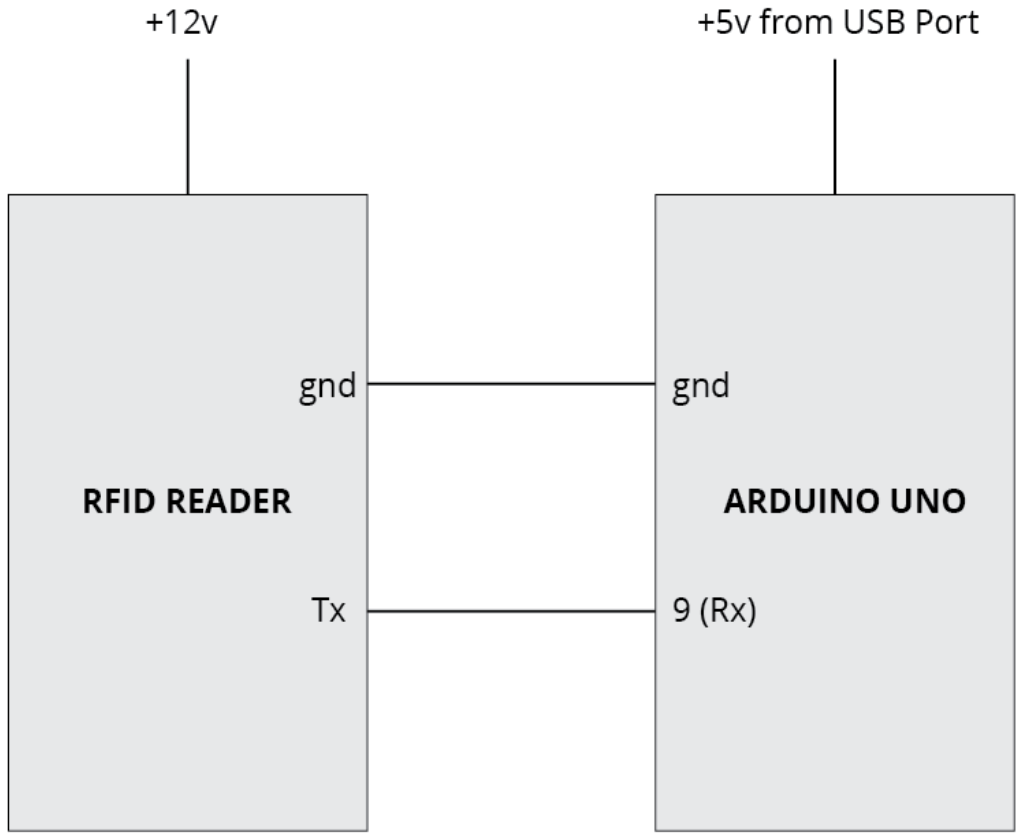
Radio Frequency Identification systems consist of an RFID tag (typically many tags) and an interrogator or reader. The interrogator emits a field of electromagnetic waves from an antenna, which are absorbed by the tag.

A. Tag

B. Reader

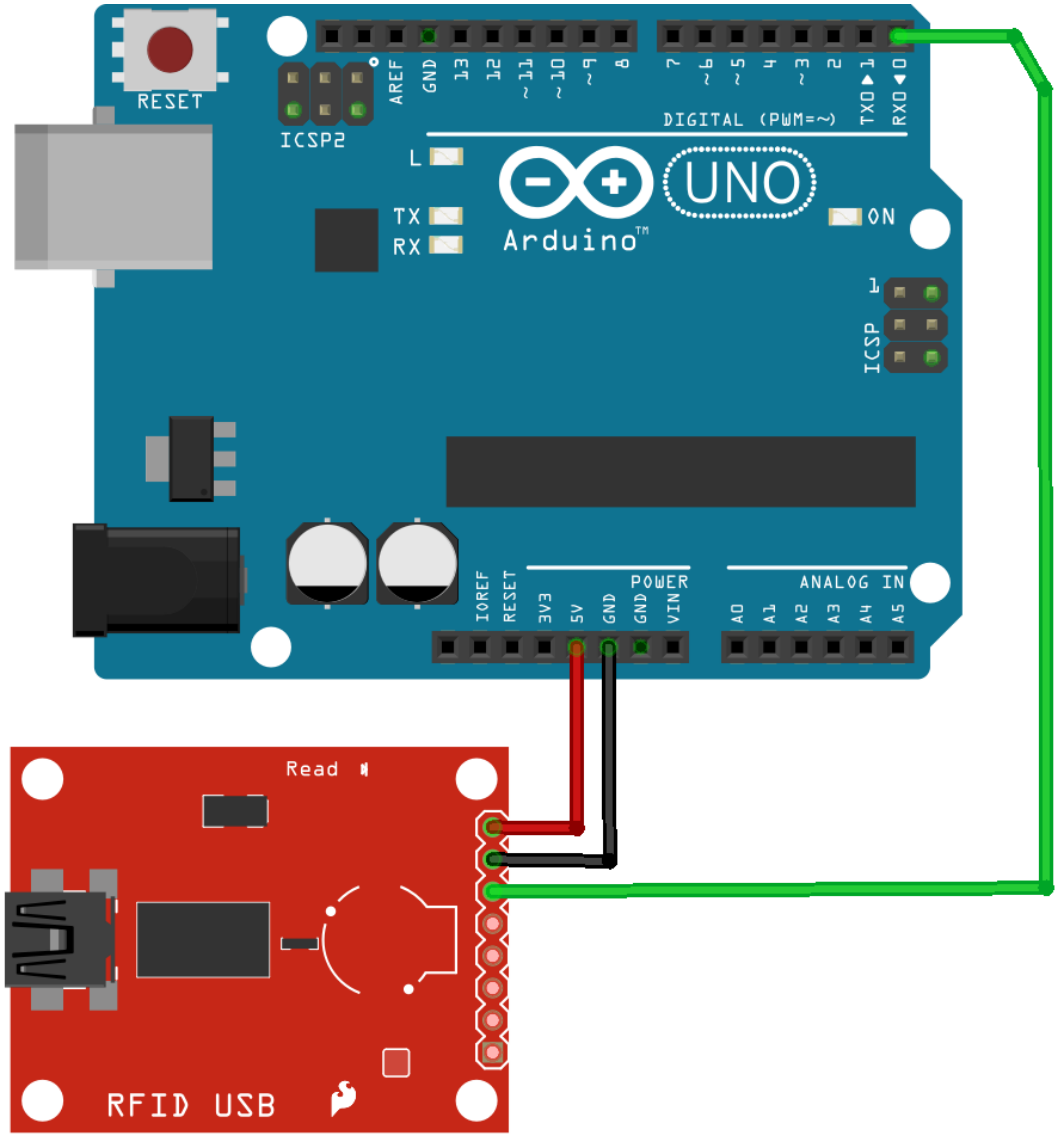
INTERFACING RFID WITH ARDUINO





Interfacing RFID Reader to Arduino

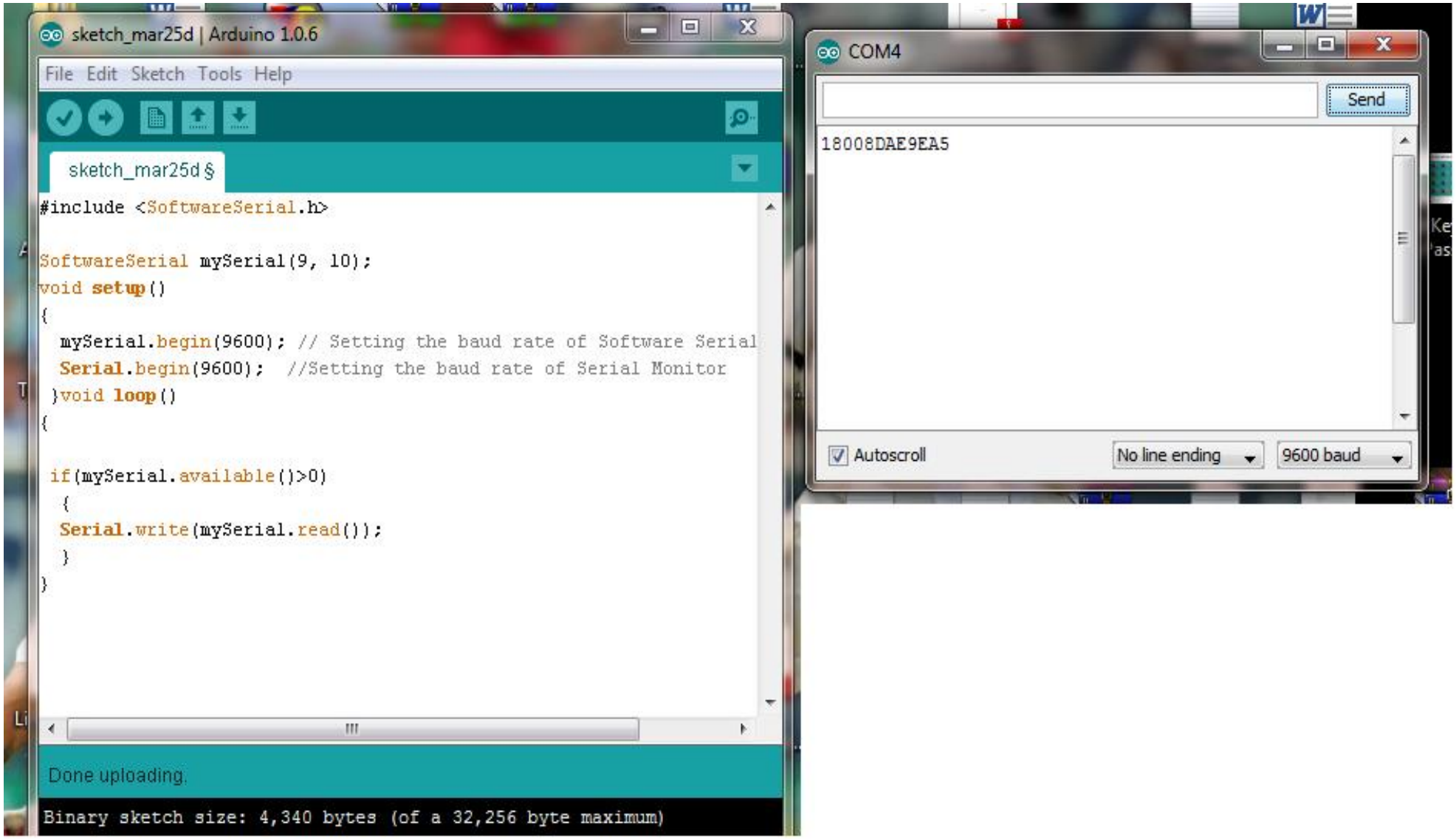
INTERFACING RFID WITH ARDUINO



PROGRAM - INTERFACING RFID WITH ARDUINO

```
#include <SoftwareSerial.h>
SoftwareSerial mySerial(9, 10);
void setup()
{
  mySerial.begin(9600); // Setting the baud rate of Software Serial Library
  Serial.begin(9600);  //Setting the baud rate of Serial Monitor
 }
void loop()
{
 if(mySerial.available()>0)
  {
  Serial.write(mySerial.read());
  }
}
```

INTERFACING RFID WITH ARDUINO



PROGRAM - INTERFACING RFID WITH ARDUINO (READ MULTIPLE TAG)

```
#include<SoftwareSerial.h>
SoftwareSerial mySerial(9,10);
int read_count=0,tag_count=0;
int j=0,k=0; // Variabvles to iterate in for loops
char data_temp, RFID_data[12], data_store[10][12];
boolean disp_control;

void setup()
{
mySerial.begin(9600);
Serial.begin(9600);
}

void loop()
{
RecieveData();
StoreData();
PrintData();
}

void RecieveData()
{
if(mySerial.available()>0)
{
data_temp=mySerial.read();
RFID_data[read_count]=data_temp;
read_count++;
}
}
 void StoreData()
{
 if(read_count==12)
{
disp_control=true;
for(k=tag_count;k<=tag_count;k++)
{
for(j=0;j<12;j++)
{
data_store[k][j]=RFID_data[j];
}
}
read_count=0;
tag_count++;
}
}

void PrintData()
{
if(disp_control==true)
{
  for(k=0;k<=tag_count;k++)
{
                for(j=0;j<12;j++)
  {
                Serial.write(data_store[k][j]);
  }
  Serial.println();
}
disp_control=false;
}
}
```

INTERFACING RFID WITH ARDUINO (READ MULTIPLE TAG)

RFID_Save_Array | Arduino 1.0.6

File Edit Sketch Tools Help

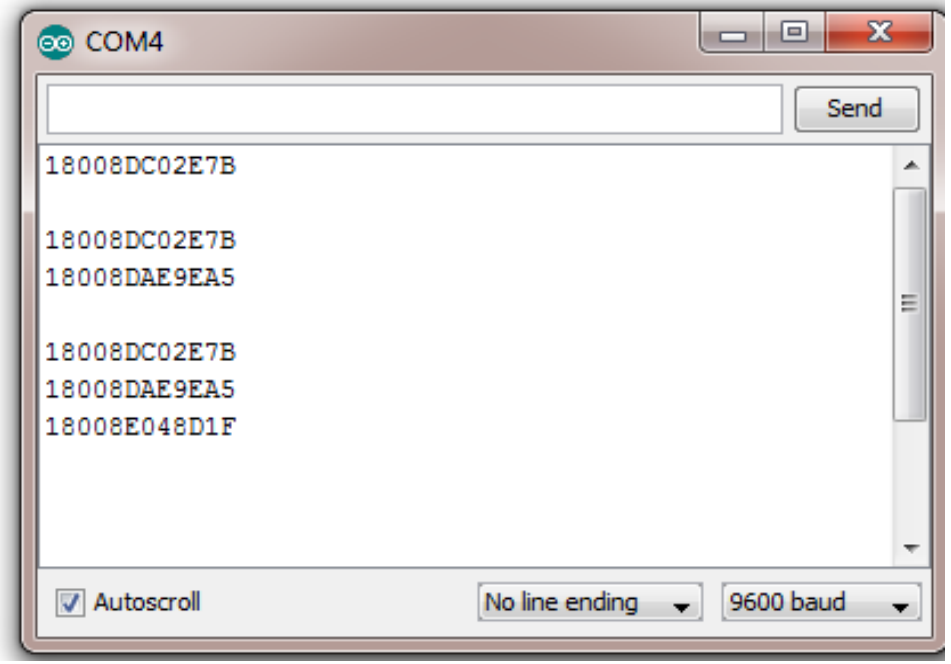
RFID_Save_Array §

```
#include<SoftwareSerial.h>
SoftwareSerial mySerial(9,10);
int read_count=0,j=0,tag_count=0,k=0;
char data_temp, RFID_data[12], data_store[10][12];
boolean disp_control;

void setup()
{
mySerial.begin(9600);
Serial.begin(9600);
}

void loop()
{
RecieveData();
StoreData();
PrintData();
}

void RecieveData()
{
if(mySerial.available()>0)
{
data_temp=mySerial.read();
RFID_data[read_count]=data_temp;
```



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QUERY & DOUBT SESSION