# United International University
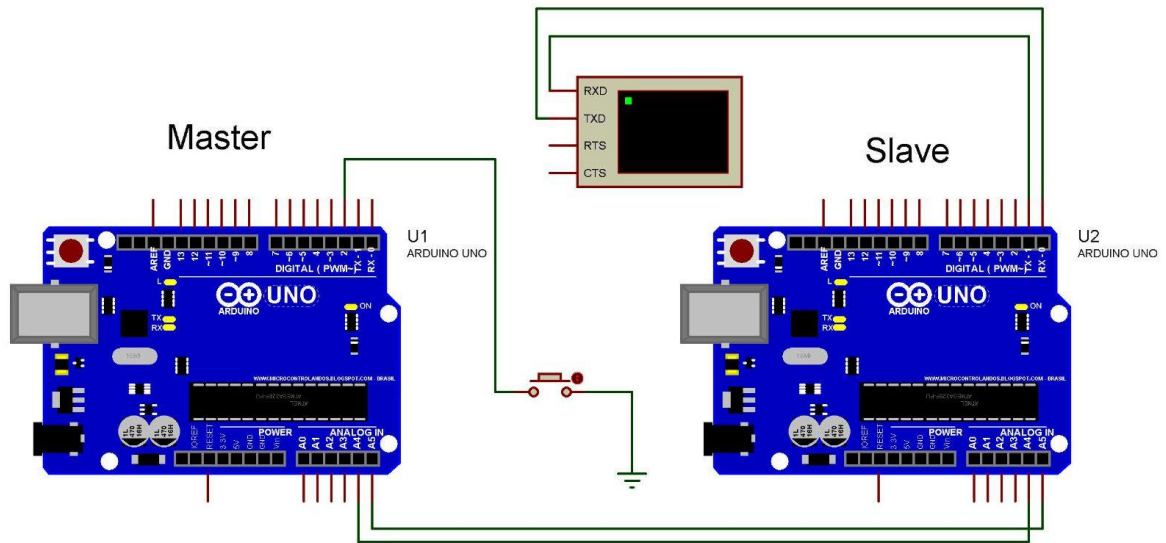## QUEST FOR EXCELLENCE

Lab Report (Grouped)
Microprocessor and Microcontroller lab
Group: 3 | Section: D

| Submitted By | Submitted To |
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Submission Date: 18.06.23

**Diagram Desing:**

Master

Slave

RXD
TXD
RTS
CTS

U1
ARDUINO UNO

U2
ARDUINO UNO

## Code:

```cpp
//Master Code:
#include <Wire.h>

int first=0,second=1,next=0,count=1;
void setup()
{
  Wire.begin();
  pinMode(2, INPUT_PULLUP);
}

void loop(){
  int x = digitalRead(2);
  if(x == LOW){
    fibo();
    delay(500);
  }
}

void fibo(){
  Wire.beginTransmission(4);
  if(count == 1){
    next = count;
  }else{
    next = first + second;
    first = second;
    second = next;
  }
  Wire.write(next);
  Wire.endTransmission();
  count++;
}
```

```
//Slave Code:
#include <Wire.h>

void setup()
{
  Wire.begin(4);
  Wire.onReceive(receiveEvent);
  Serial.begin(9600);
}

void loop()
{
  //delay(100);
}

void receiveEvent()
{
  while (Wire.available())
  {
    int num = Wire.read();
    Serial.print(num);
    Serial.print(" ");
  }
}
```