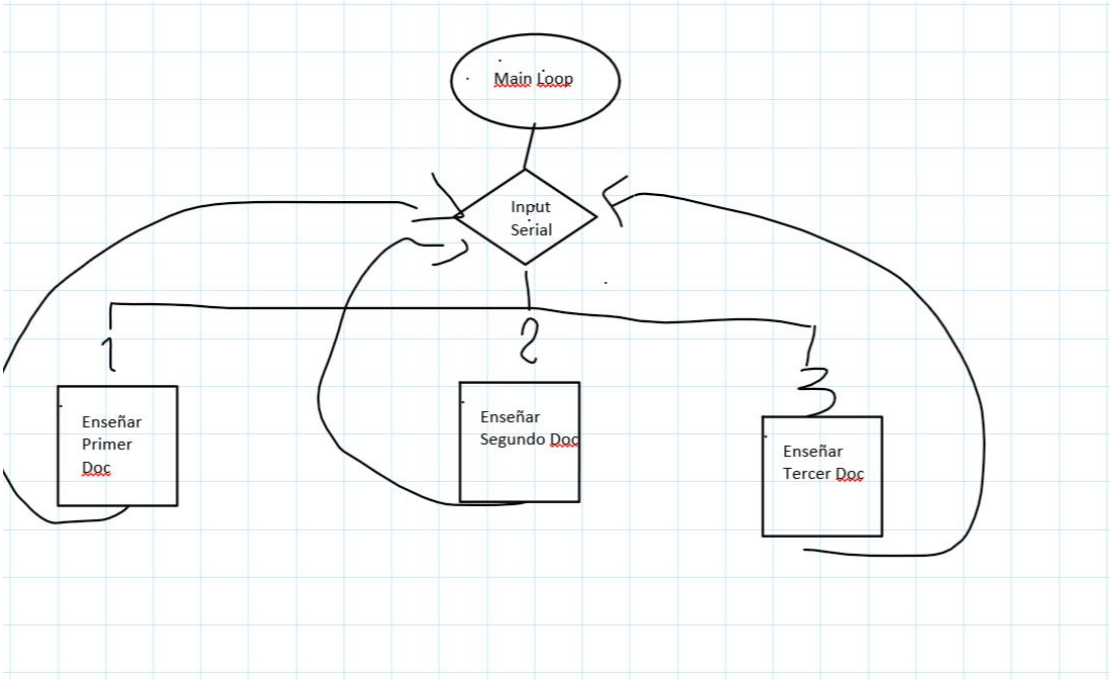
Universidad del Valle de Guatemala
Digital II
Sección 11

Carlos Cuellar
Carné 19275
Enero 2021

REPORTE #5:
Almacenamiento SD en TIVA C

Link de repositorio: https://github.com/Cue19275/Digital2

Pre-lab:



Carlos Cuellar
Carné 19275

Código:

```
#include <SPI.h>
#include <SD.h>

File root;
File myFile;

int input;

void setup()
{
  // Open serial communications and wait for port to open:
  Serial.begin(9600);
  SPI.setModule(0);


  Serial.print("Initializing SD card...");
  pinMode(PA_3, OUTPUT);

  if (!SD.begin(PA_3)) {
    Serial.println("initialization failed!");
    return;
  }
  Serial.println("initialization done.");

  Serial.println("INGRESE 1, 2 O 3 PARA IMPRIMIR EL ARCHIVO DESEADO");
  root = SD.open("/");

  printDirectory(root, 0);

  Serial.println("done!");
}

void loop()
{
  input = Serial.read();
  if(input = 49){
  myFile = SD.open("hongo.txt");
  if (myFile) {
    Serial.println("hongo.txt:");

    // read from the file until there's nothing else in it:
    while (myFile.available()) {
      Serial.write(myFile.read());
    }
    // close the file:
    myFile.close();
```

Carlos Cuellar
Carné 19275


```
  } else {
    // if the file didn't open, print an error:
    Serial.println("error opening test.txt");
  }


    Serial.println("INGRESE 1, 2 O 3 PARA IMPRIMIR EL ARCHIVO DESEADO");
   root = SD.open("/");

    printDirectory(root, 0);

    while(true) {

     File entry =  dir.openNextFile();
     if (! entry) {
       // no more files
       break;
     }
     for (uint8_t i=0; i<numTabs; i++) {
       Serial.print('\t');
     }
     Serial.print(entry.name());
     if (entry.isDirectory()) {
       Serial.println("/");
       printDirectory(entry, numTabs+1);
     } else {
       // files have sizes, directories do not
       Serial.print("\t\t");
       Serial.println(entry.size(), DEC);
     }
     entry.close();
   }


  }
  else if(input = 50){
      myFile = SD.open("egg.txt");
  if (myFile) {
    Serial.println("egg.txt:");

    // read from the file until there's nothing else in it:
    while (myFile.available()) {
      Serial.write(myFile.read());
    }
    // close the file:
    myFile.close();
  } else {
    // if the file didn't open, print an error:
    Serial.println("error opening test.txt");
```

Carlos Cuellar
Carné 19275


```
  }

    Serial.println("INGRESE 1, 2 O 3 PARA IMPRIMIR EL ARCHIVO
DESEADO");
   root = SD.open("/");

    printDirectory(root, 0);

    while(true) {

      File entry =  dir.openNextFile();
      if (! entry) {
        // no more files
        break;
      }
      for (uint8_t i=0; i<numTabs; i++) {
        Serial.print('\t');
      }
      Serial.print(entry.name());
      if (entry.isDirectory()) {
        Serial.println("/");
        printDirectory(entry, numTabs+1);
      } else {
        // files have sizes, directories do not
        Serial.print("\t\t");
        Serial.println(entry.size(), DEC);
      }
      entry.close();
   }

  }
   else if(input = 51){
       myFile = SD.open("trifo.txt");
  if (myFile) {
    Serial.println("trifo.txt:");

    // read from the file until there's nothing else in it:
    while (myFile.available()) {
      Serial.write(myFile.read());
    }
    // close the file:
    myFile.close();
  } else {
    // if the file didn't open, print an error:
    Serial.println("error opening test.txt");
  }

    Serial.println("INGRESE 1, 2 O 3 PARA IMPRIMIR EL ARCHIVO
DESEADO");
   root = SD.open("/");
```

Carlos Cuellar
Carné 19275


```
    printDirectory(root, 0);

    while(true) {

      File entry =  dir.openNextFile();
      if (! entry) {
        // no more files
        break;
      }
      for (uint8_t i=0; i<numTabs; i++) {
        Serial.print('\t');
      }
      Serial.print(entry.name());
      if (entry.isDirectory()) {
        Serial.println("/");
        printDirectory(entry, numTabs+1);
      } else {
        // files have sizes, directories do not
        Serial.print("\t\t");
        Serial.println(entry.size(), DEC);
      }
      entry.close();
    }

  }
}

void printDirectory(File dir, int numTabs) {
   while(true) {

      File entry =  dir.openNextFile();
      if (! entry) {
        // no more files
        break;
      }
      for (uint8_t i=0; i<numTabs; i++) {
        Serial.print('\t');
      }
      Serial.print(entry.name());
      if (entry.isDirectory()) {
        Serial.println("/");
        printDirectory(entry, numTabs+1);
      } else {
        // files have sizes, directories do not
        Serial.print("\t\t");
        Serial.println(entry.size(), DEC);
      }
      entry.close();
    }
```

Universidad del Valle de Guatemala
Digital II
Sección 11

Carlos Cuellar
Carné 19275
Enero 2021

}