

Figura 1: Serial monitor - Main code

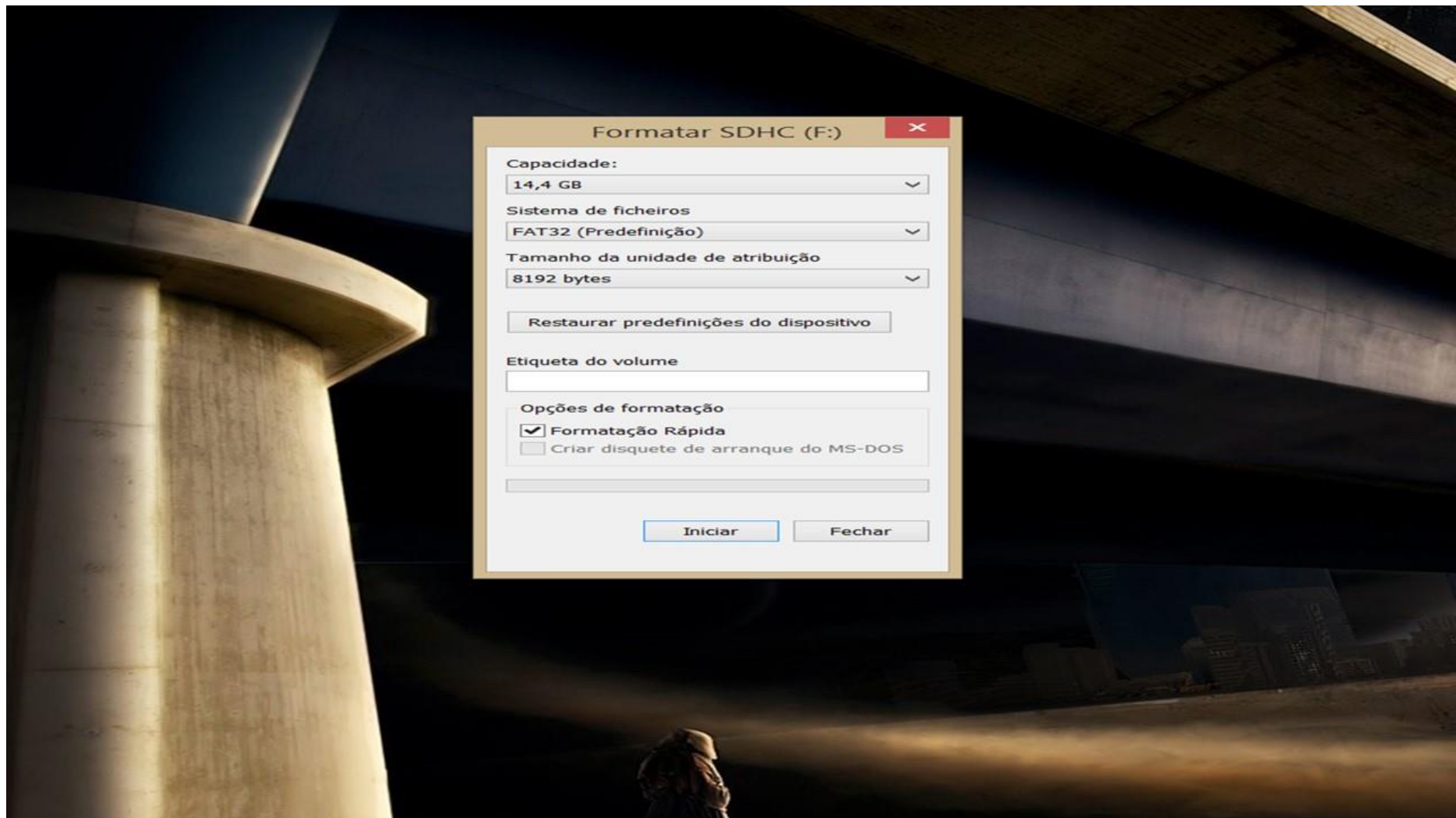


Figura 2: SD Card

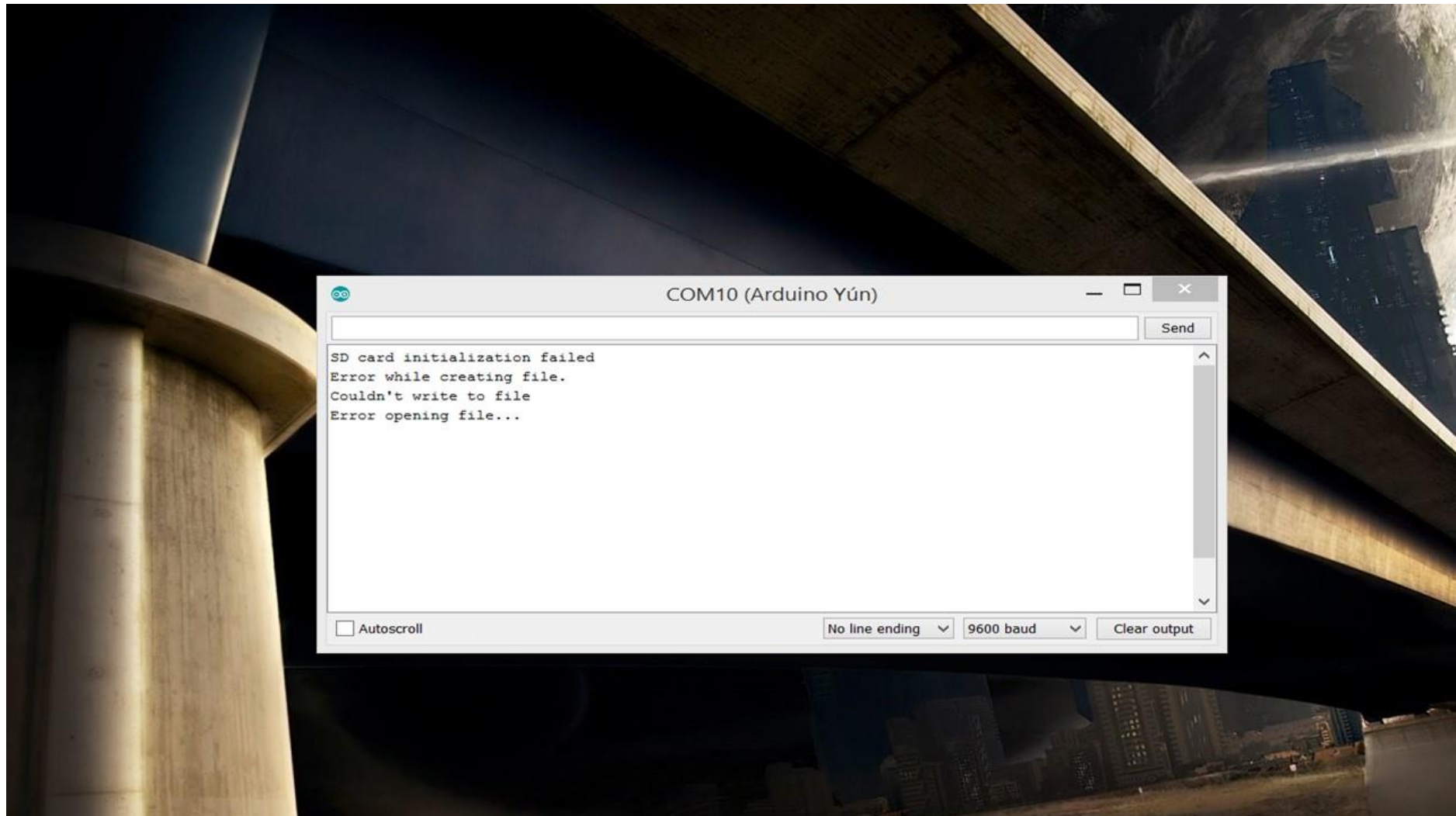
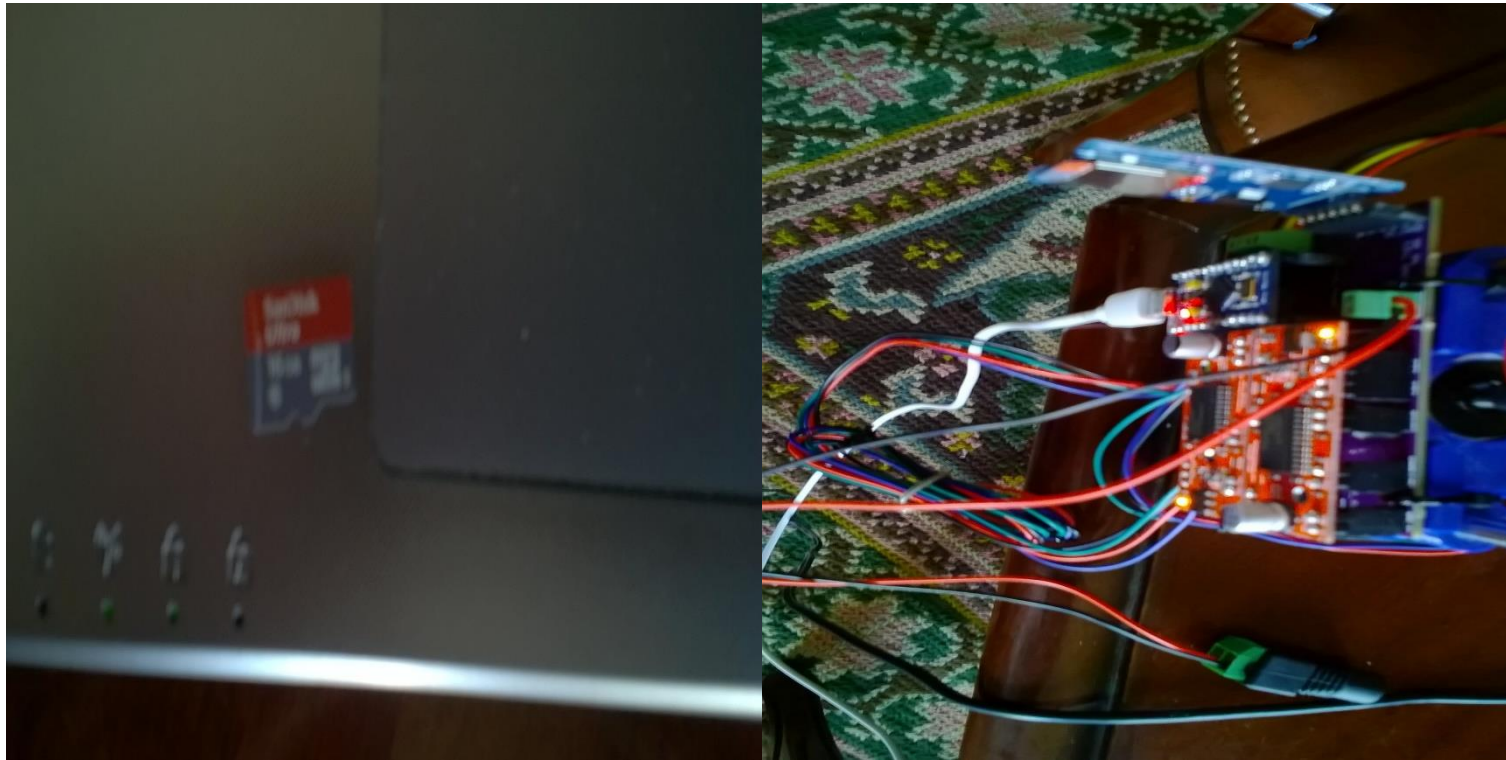
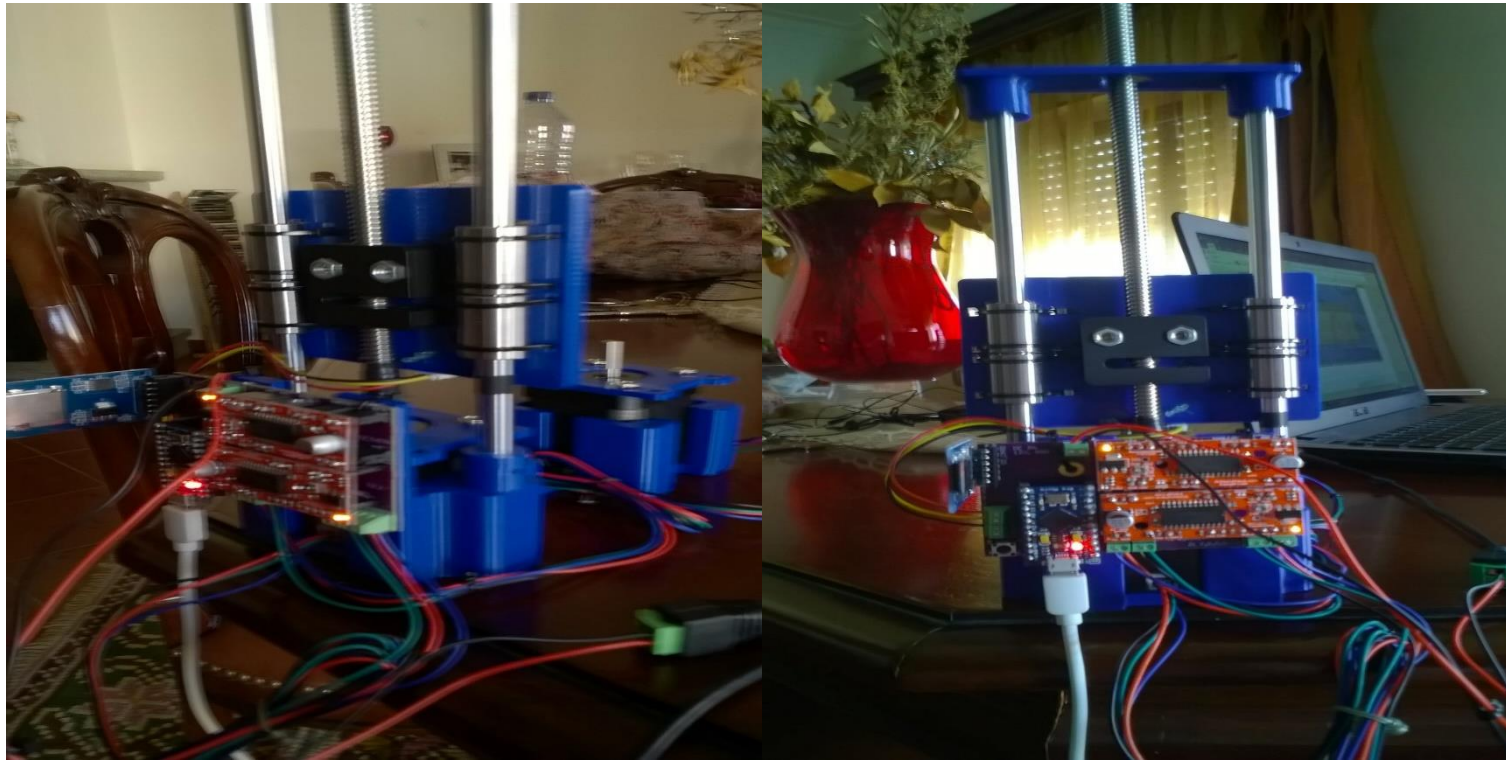
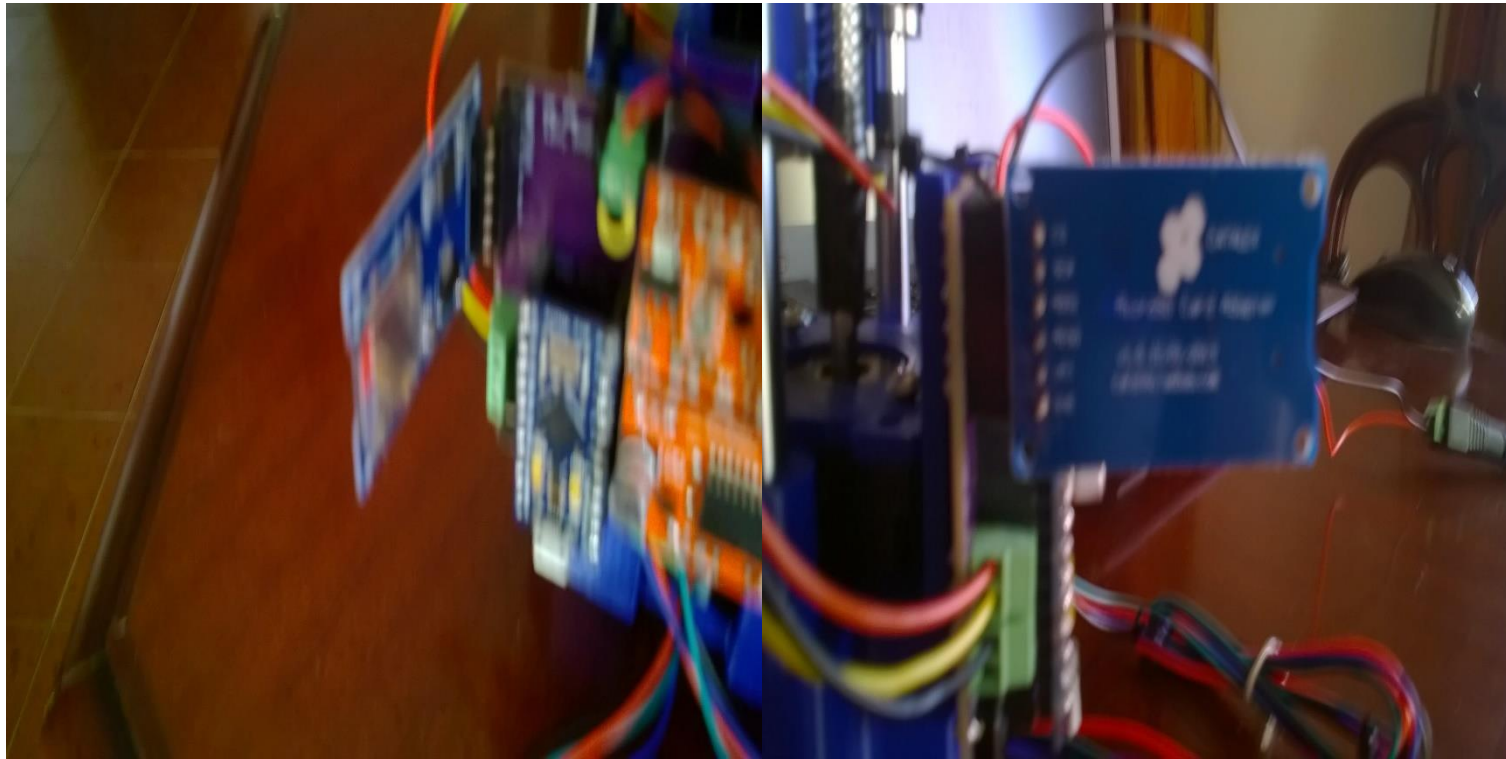


Figura 3: Serial monitor - Code 2









## ***CODE 2***

```
#include <SD.h>

#include <SPI.h>

int CS_PIN = 10;

File file;

void setup()
{

    Serial.begin(9600);

    initializeSD();
    createFile("test.txt");
    writeToFile("This is sample text!");
    closeFile();

    openFile("prefs.txt");
    Serial.println(readLine());
    Serial.println(readLine());
    closeFile();
}

void loop()
{

}

void initializeSD()
```

```
{  
  Serial.println("Initializing SD card...");  
  pinMode(CS_PIN, OUTPUT);  
  
  if (SD.begin())  
  {  
    Serial.println("SD card is ready to use.");  
  } else  
  {  
    Serial.println("SD card initialization failed");  
    return;  
  }  
}
```

```
int createFile(char filename[])  
{  
  file = SD.open(filename, FILE_WRITE);  
  
  if (file)  
  {  
    Serial.println("File created successfully.");  
    return 1;  
  } else  
  {  
    Serial.println("Error while creating file.");  
    return 0;  
  }  
}
```

```
int writeToFile(char text[])
```

```
{  
  if (file)  
  {  
    file.println(text);  
    Serial.println("Writing to file: ");  
    Serial.println(text);  
    return 1;  
  } else  
  {  
    Serial.println("Couldn't write to file");  
    return 0;  
  }  
}  
  
void closeFile()  
{  
  if (file)  
  {  
    file.close();  
    Serial.println("File closed");  
  }  
}  
  
int openFile(char filename[])  
{  
  file = SD.open(filename);  
  if (file)  
  {  
    Serial.println("File opened with success!");  
    return 1;  
  }  
}
```

```
} else  
{  
    Serial.println("Error opening file...");  
    return 0;  
}  
}
```

```
String readLine()  
{  
    String received = "";  
    char ch;  
    while (file.available())  
    {  
        ch = file.read();  
        if (ch == '\n')  
        {  
            return String(received);  
        }  
        else  
        {  
            received += ch;  
        }  
    }  
    return "";  
}
```