int a=10;

void setup() {

// put your setup code here, to run once:

Serial.begin(9600);

}

void loop() {

// put your main code here, to run repeatedly:

Serial.println(a);

}

int a=0;

void setup() {

// put your setup code here, to run once:

Serial.begin(9600);

}

void loop() {

// put your main code here, to run repeatedly:

if (Serial.available()>0)

a=Serial.parseInt();

}

long randNumber=0;

void setup() {

// put your setup code here, to run once:

Serial.begin(9600);

randomSeed(analogRead(0));

}

void loop() {

// put your main code here, to run repeatedly:

randNumber=random(101); //generates a random number from 0 to 100

Serial.println((String)"generated random number is: "+randNumber+".");

delay(500);

}

//https://www.arduino.cc/reference/en/language/functions/communication/serial/readstring/

void setup() {

// put your setup code here, to run once:

Serial.begin(9600);

pinMode(LED\_BUILTIN,OUTPUT);

}

void loop() {

if (Serial.available()>0){

String inputCommand=Serial.readString();

Serial.println((String)"Entered command: "+inputCommand);

if (inputCommand=="on" ||inputCommand=="ON"||inputCommand=="On")

{

digitalWrite(LED\_BUILTIN,HIGH);

}

if (inputCommand=="off"||inputCommand=="OFF"||inputCommand=="Off")

{

digitalWrite(LED\_BUILTIN,LOW);

}

}

}

//https://www.arduino.cc/reference/en/language/functions/communication/serial/parsefloat/

//parsInt command exist as well.

float radius=0;

float area=0;

void setup() {

// put your setup code here, to run once:

Serial.begin(9600);

Serial.println("Strated...");

}

void loop() {

if (Serial.available()>0){

radius=Serial.parseFloat();

area=PI\*pow(radius,2);

Serial.println((String)"Entered radius: "+radius+" Area= "+area);

Serial.println();

}

}

int incomingNumber=0;

int a=1;

int b=1;

int c=0;

int s=0;

void setup() {

// put your setup code here, to run once:

Serial.begin(9600);

Serial.println("Enter the number of terms that you want.");

}

void loop() {

// put your main code here, to run repeatedly:

if (Serial.available()>0){

incomingNumber=Serial.parseInt();

Serial.println((String)"User entered "+incomingNumber+".");

Serial.print("1,1,");

for (int i=1;i<=incomingNumber-2;i++){

s=a+b;

Serial.print((String)s+',');

c=a;

a=b;

b=c+b;

}

}

}

void setup() {

// put your setup code here, to run once:

Serial.begin(9600);

}

void loop() {

// put your main code here, to run repeatedly:

Serial.println("\"Hello World!\" is the first program that programmers write.");

Serial.println("'Hello World!\' is the first program that programmers write.");

Serial.println();

delay(120000);

}

byte b = 45;

void setup() {

Serial.begin(9600);

Serial.println(b); // print in decimal by default

Serial.println(b, DEC); // print in decimal, same as above

Serial.println(b, BIN); // print in binary

Serial.println(b, HEX); // print in hexadecimal

}

void loop() {

}

String str="ABC DEF";

String str2="ABC DEF";

String str3="xyz";

String str4="ABC dEf";

int n=0;

void setup(){

// put your setup code here, to run once:

Serial.begin(9600);

}

void loop(){

// put your main code here, to run repeatedly:

Serial.println((String)"Given string is: "+str);

Serial.println();

Serial.println((String)"length of this string is: "+str.length());

for (int i=0;i<str.length();i++)

Serial.println((String)"charAt("+i+") is:"+str.charAt(i));

Serial.println();

Serial.println((String)"\"ABC DEF\" is compared with \"ABC DEF\" (comparison is case sensitive). Result is: "+str.equals(str2));

Serial.println((String)"\"ABC DEF\" is compared with \"xyz\" (comparison is case sensitive). Result is: "+str.equals(str4));

Serial.println((String)"\"ABC DEF\" is compared with \"ABC dEf\" (comparison is not case sensitive). Result is: "+str.equalsIgnoreCase(str3));

Serial.println();

str.toLowerCase(); //Result is saved in the str variable.

Serial.println("Conversion of \"ABC DEF\" to lower case: "+str);

str3.toUpperCase(); //Result is saved in the str variable.

Serial.println("Conversion of \"xyz\" to upper case: "+str3);

String str5="ABC DEF ";

str5.trim(); //trim the white space off the string

Serial.println();

Serial.println((String)"After trimming \"ABC DEF \" is converted to:\""+str5+"\"");

String str6="Hello World!";

Serial.println();

Serial.println("str6=\"Hello World!\"");

Serial.println((String)"Value of str6 before running the replace command: "+str6);

str6.replace("World","Arduino");

Serial.println((String)"Value of str6 after running the replace command: "+str6);

Serial.println();

String str7="ABCDEFGHIJKLM";

str7.remove(2,3);

Serial.println((String)"remove(2,3) is applied to \"ABCDEFGHIJKLM\". Result is: \""+str7+"\".");

String str8="123";

int sum1=str8.toInt()+5;

Serial.println();

Serial.println((String)"sum= "+sum1+". Expected value is 128.");

String str9="123.456";

float sum2=str9.toFloat()+5.0;

Serial.println();

Serial.println((String)"sum= "+sum2+". Expected value is 128.456.");

String str10="123.456";

double sum3=str10.toDouble()+5.0;

Serial.println();

Serial.println((String)"sum= "+sum3+". Expected value is 128.456.");

Serial.println("----------------------------------------------------------------");

delay(180000);

}

char ch1;

void setup() {

// put your setup code here, to run once:

Serial.begin(9600);

}

void loop() {

// put your main code here, to run repeatedly:

ch1=Serial.read();

if (Serial.available()>0){

Serial.println((String)"ch1="+ch1);

if (isUpperCase(ch1)){

Serial.println("variable ch1 is UPPERCASE.");

}else{

Serial.println("variable ch1 is lowercase.");

}

if (isDigit(ch1)){

Serial.println("variable ch1 is a digit.");

}else{

Serial.println("variable ch1 is not a digit.");

}

Serial.println();

}

delay(1000);

}