**Scope -** area where it is available

**1. Local** - limited area. - inside functions - {}

**2. global -**unlimited or vast -outside functions

**writing our code -**

where do we write

**1.online -** on browser

**2. offline -**on our system(laptop)

**local environment -** our system

**html** - hypertext markup language

**filename.extension**

index.html

**css -** cascading style sheets

**filename.extension**

style.css

**js -** javascript

**filename.extension**

sketch.js

**library files -** where books are stored - we borrow/rent books

**1. directly use from website -** internet - online

**2. download on to ur system. -** offline

**editor -** where we write the code**.**

**online ->** editor.p5.js , code.org

**offile ->** VSC - visual studio code

**server -** helps to run the code

**Github -** online store for storing code, files - remote (not on our system)

**upload and download**

**repository (project)**

**Libraries**

Libraries are collections of code which can be reused by other programs in their code. Someone has written code for these and created a library so that anyone can use them.

We are simply using several functions from this library into our code. The library we are using in our code is called p5.play

It is common practice for developers to use code written by others into their program. It helps us create applications and programs faster. We will learn how to create our own libraries soon!

We tell the computer to use the p5 library using <**script**> tags in index.html.

**index.html** is the file which loads **FIRST** when you load your game.

**index**.**html** file contains **tags** which can tell the computer what to display. Here we use tags instead of symbols. Using tags, we can tell the computer to load any JavaScript code.

Inside two tags, we tell the computer what to display on the page.

Inside two tags, we tell the computer the different libraries we want to load.

We write our code in a **sketch.js** file. It looks very similar to the code on code.org. Because code.org is also using the p5.js library in the backend.

There are other libraries inside script tags which we are using in our code - p5.js, p5.dom.

So you know:

● the JavaScript library we are using in our game;

● the file where we are writing our game; and

● the HTML file which is responsible for displaying content and loading our libraries.

**style.css** instructs the computer to apply formatting - changing style, adding margin, padding etc.

**GitHub**

**GitHub** is a website where we can store our code and share that with others.

The Code we download from GitHub will be in a zip file. We need to extract it so that we can run this in the VS Code editor.

We have all the files on our local machine.

Open the VS code and open the p5\_template folder in VS Code. Click on file>Go to Open folder option>select folder you want to open.

We need a **server** to **host** our files so that we can run our game.

In code.org, the site had a server running in the background which was hosting all our files.

Our VS Code also has an extension which will help us run a live server. The extension is called **‘Live Server’**.

**Steps to install the Live Server extension:**

1) Click on View and then select ‘Extensions’ or press “Ctrl + Shift+x”.

2) Search for “Live Server”.

3) Click on install.

**To start the Live Server**:

1) Open the project Folder in the VS Code.

2) Click on Go Live in the status bar to turn the live server on and off.

OR right click on index.html file and select open with live server.

Live Server opens the browser window showing the output of our code.

**Note**: This link will run on your local machine only. We cannot share this link with others.