1. luadraw palettes

a. Description

You can use @prism palettes with luadraw which is a package that greatly facilitates the creation of high-quality 2D and 3D plots via Lua and Ti*k*Z.

> **ⓘ Note.**
>
> *Initially, the @prism project was created to provide ready-to-use palettes for luadraw.*

b. Use a luadraw palette

The Lua palette names all use the prefix pal followed by the name available in the file palettes.json. You can access a palette by two ways.

- palGistHeat is a Lua variable.

- getPal('GistHeat') and getPal('palGistHeat') are equal to palGistHeat.

> **ⓘ Note.**
>
> *The Lua palette variables are arrays of arrays of three floats. Here is the definition of palGistHeat.*
>
> ```
> palGistHeat = {
>     {0.0, 0.0, 0.0},
>     {0.105882, 0.0, 0.0},
>     {0.211764, 0.0, 0.0},
>     {0.317647, 0.0, 0.0},
>     {0.429411, 0.0, 0.0},
>     {0.535294, 0.0, 0.0},
>     {0.641176, 0.0, 0.0},
>     {0.752941, 0.003921, 0.0},
>     {0.858823, 0.145098, 0.0},
>     {0.964705, 0.286274, 0.0},
>     {1.0, 0.42745, 0.0},
>     {1.0, 0.57647, 0.152941},
>     {1.0, 0.717647, 0.435294},
>     {1.0, 0.858823, 0.717647},
>     {1.0, 1.0, 1.0}
> }
> ```

There are also some options. To explain how this works, let's consider the following use case.

```
mypal = getPal(
    'GistHeat',
    {
        extract = {2, 5, 8, 9},
        shift   = 1,
        reverse = true
    }
)
```

To simplify the explanations, we will refer to the colors in the standard palette 'GistHeat' as coul_1, coul_2,, etc. The options are then **processed in the following order**.

1. {coul_2, coul_5, coul_8, coul_9} is the result of the extraction.

2. {coul_9, coul_2, coul_5, coul_8} comes from the shifting applied to the extracted palette (colors move to the right if shift is positive).

3. {coul_8, coul_5, coul_2, coul_9} is the reversed version of the shifted palette.