

Topics:

DataTypes:

Primitive:

number, string, boolean, null, undefined, bigint, symbol (for unique key)

typeof - return the string ('number', 'boolean', 'string', 'object'...)

typeof typeof - 'string'

Composite: combination of single/multiple types

Array --> [1, 'sanjay', boolean, null]

Note: an array can also contain composite types (Array, Object)

Eg: Array can contain array itself

```
[[1, 2, 3], ['Sanjay', 'Santosh', 'Manoj'], ['Python', 'JavaScript']]
```

Array can also contain objects

```
[
  { name: 'Manoj', age: 12, origin: 'Tanjavur' },
  { name: 'Sanjay', age: 25, origin: 'Chennai' },
  { name: 'Manikandan', age: 24, origin: 'Bengaluru' }
]
```

```
Object --> {
  name: 'Sanjay',
  role: 'Developer',
  expe: 10,
}
```

Object Value can also be a composite value

Eg: Object can contain array, object

```
{
  "skills": ["Python", "Javascript"],
  "contact": {
    "mobile": "9090909090",
    "email": "sanjay@gmail.com",
    "website": "sanjay.com"
  },
  "isIndian": true
}
```

Functions:

used to create a functionality using set of statements with optional return statement

normal function

arrow function

{ } - object elements

[] ---> Array elements / array elements accessing

() ---> methods/functions

Scopes:

global ---> parent scope every scopes ()

function/local scope (inside function () { })

block { }

{ } ---> block of lines

var - global/function level scope

let, const - global, function, block (Lives only the scope)

Task:

Practice all the data declaration & initialization using different scopes

Visualize it in Python Tutor: <https://pythontutor.com/visualize.html#mode=edit>

Next Session:

difference between normal function & arrow functions

Operators:

Arithmetic: +, -, *, /, %(5 % 2 ---> 1 (remainder))

Assignment: =

Logical: !(not), &&, ||

compariason: >, <, >=, <=, !=, ==, ===

Boolean: true or false

Conditional Statements:

if else

switch case

== vs ===

looping, conditions, simple problems

looping: it is a process of repeating a block statements again and again

for, while, do while

how many times or when to stop the looping

concepts in looping

initialization, termination condition, inc/drec