* Functions:-

A function is a reusable block of code that performs a specific task. It takes input(s), processes them, and optionally returns an output. Functions are standalone entities and are called directly by their name.

Types of functions:-

1. Function defination

Syntax:

Defining a function

function function\_name(parameters-> not mendentory){

    block of code

}

calling a function

function\_name(Arguments -> if not passed Undefined Prints)

Hoisting

hoisting :

hoisting is a JavaScript mechanism where variables and function declarations are moved to the top of their scope before code execution.hoisting is only allowed for function declarations. Hoisting is can only use in function defination

1. Function Expression

const name = function fullname(fname, lname){

      console.log(`The firstname is ${fname} and lastname is ${lname}`);

}

1. Arrow function

const name = (fname = "a", lname = "v") => {

  console.log(`The firstname is ${fname} and lastname is ${lname}`);

};

name("vitthal", "korvan");

1. Immediately Invoked Function Expressions (IIFE)

Useful for creating isolated scopes. Often used to avoid polluting the global namespace.

(function () {

    console.log('Hello geeta');

})();

(() => {

    console.log('Hello shweta');

})();

* Objects:-

objects is reference type arrays are good but not sufficient for real world data objects store key value pairs objects don't have index

Ways for creating objects:-

1. Object literals

const person = {

  name: "John",

  age: 30,

  occupation: "Developer",

  isMarried:true,

  mail:'johncena@gmail.com'

};

1. With new keyword

const person = new Object()

  name: "John",

  age: 30,

  occupation: "Developer",

  isMarried:true,

  mail:'johncena@gmail.com'

1. Object.create

const person = Object.create(null);

person.name = "John";

person.age = 30;

person.occupation = "Developer";

console.log(person);

* Methods:-

A method is a function that is associated with an object or a class. Methods are called using the dot notation on an object.

* Array:-

Array in JavaScript can store any type of data. (primitive and non primitive) (hetrogenous data) Arrays don't have fixed value. array value can differ by size of the array. pre-defined methods to work on array

* String:-

Is a Set of characters