**Anonymous vs Named function**

A named function is a function that has a name associated with it, such as function add(x: number, y: number): number. An anonymous function is a function that does not have a name, such as (x: number, y: number) => x + y. Both types of functions can be used in TypeScript, but they have some differences.

One difference is that **named functions can be hoisted**, meaning they can be used before they are defined. Anonymous functions cannot be hoisted, so they must be assigned to a variable or passed as an argument before they are used.

Another difference is that **named functions can have self-references**, meaning they can use their own name to call themselves recursively or access their own properties. Anonymous functions do not have self-references, so they must use the arguments.callee property or a variable that points to them to achieve the same effect.

A third difference is that **named functions can have more descriptive stack traces**, meaning they can show their name in the error messages or debugging tools. Anonymous functions do not have names, so they show as (anonymous function) or something similar in the stack traces.

**Function**

Functions allow you to define reusable blocks of code that can take inputs and produce outputs. Function makes your code modular. TypeScript adds type information to functions, which helps to ensure that the functions are used correctly and avoid errors.

**Two types of function:** Built-in function and user define function.

**Built-in function:** prompt(), console.log(), push(), sort()

**Parts of function:** function name, Parameters, return and body of the function.

**Terminologies:** invoking or calling of function, e.g. sum(4,6)

**Key points of function**

* Definition
* Difference
* Usages of arrow function like map() and filter function. Short syntax. Preferable in all cases.
* **Real life examples:** time checking, weather checking, mathematical formula,

**Key point of if, if-else and else-if**

* Condition will all comparison and logical operators, their result(true or false) will decide the block of code execution,