

# Strongly typed vs Weakly typed language

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## Strongly typed language

- In strongly typed languages you get an error message if the types do not match in an expression.

E.g. Java and python both are strongly typed languages.

In python, you get an error if you try to add a number and string:

```
1 a = 10
2 b = "Hello"
3 a+b
```

You will get this error at runtime:

```
Traceback (most recent call last):
  File "<string>", line 3, in <module>
TypeError: unsupported operand type(s) for +: 'int' and 'str'
>
```

## Weakly typed language:

- In a weakly typed language, there are implicit type conversions. Instead of giving you an error, it will convert one of the values automatically and produce a result, even if such conversion loses data.

E.g. JavaScript is a weakly typed language.

```
1 var a = 10;
2 var b = "john"
3 console.log(a + b);
```

Instead of an error, javascript will convert a to string and then concatenate the strings.

```
10john
```