JavaScript vs Python?







Variable Declaration



JAVASCRIPT

```
let x = 5;
const y = 10;
var z = 15; // older syntax
```

Uses 'let', 'const', or 'var' keywords.



PYTHON

$$x = 5$$

$$y = 10$$

$$z = 15$$

No declaration keyword needed.



Function Definition

```
function greet(name) {
  return `Hello, ${name}!`;
}
// Arrow function
const greet = (name) => {
  return `Hello, ${name}!`;
}
```

```
def greet(name):
    return f"Hello, {name}!"

# Lambda function
    greet = lambda name: f"Hello, {name}!"
```



Conditional Statements

```
if (x > 0) {
    console.log("Positive");
} else if (x < 0) {
    console.log("Negative");
} else {
    console.log("Zero");
}</pre>
```

```
if x > 0:
    print("Positive")
elif x < 0:
    print("Negative")
else:
    print("Zero")</pre>
```



Loops

```
// For loop
for (let i = 0; i < 5; i++) {
    console.log(i);
}

// While loop
let i = 0;
while (i < 5) {
    console.log(i);
    i++;
}</pre>
```

```
# For loop
for i in range(5):
    print(i)

# While loop
i = 0
while i < 5:
    print(i)
i += 1</pre>
```



Arrays/Lists

```
let fruits = ['apple', 'banana', 'cherry'];
  fruits.push('date');
  console.log(fruits.length);
  console.log(fruits[0]);
Uses arrays, which are objects.
```

```
fruits = ['apple', 'banana', 'cherry']
fruits.append('date')
print(len(fruits))
print(fruits[0])

Uses lists, which are built-in data structures.
```







Thank You









