The ternary operator is an alternative to the if/else statement

it's just an {if-else} statement in one (1) line!

In some cases, using a Ternary Operator can improve the performance of our code, as it can be faster than using an if-else statement.

```
int correctAns = 9;

//if condition
if (correctAns >= 10)
  print('You passed the exam');
else
  print("You didn't study enough...");
```

The print would be \rightarrow You didn't study enough...

Clearly the difference is really simple when it comes to syntax

```
If (condition){

If condition is true. Do this ....;

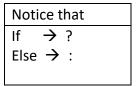
} else {

If condition is false. Do this ....;

} condition is false. Do this ....;

}
```

Notice that



Another example but instead of using integers. We will use Strings

```
String name = "Tom";

String res = name ?? "Guest";
print(res);
```

Instead of writing it like that

```
String name = "Tom";

if(name == null){
  name = "Guest";
  }
  print(name);
```

The print would be \rightarrow Tom

Note that the left operand can't be null. Because there is an assigned a value to it (which is on the right).

Bonus Tip you can write it in one line!

```
int a = 2;
int b = 3;

int small_num = (a < b) ? a : b;

print("$small_num is smaller");</pre>
```

The print would be \rightarrow 2

this ternary line can be explained by this way

