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...");

*//ternary operator*

  (correctAns >= 10)

    ? print('You passed the exam')

    : print("You didn't study  enough...");

***The print would be 🡪 You didn't study enough...***

Clearly the difference is really simple when it comes to syntax

|  |  |
| --- | --- |
| IF CONDITION  If (condition){  If condition is true. Do this …. ;  } else {  If condition is false. Do this …..;  } | Ternary operator  (condition)  ? if condition is true. Do This…  : if condition is false. Do this…. ; |

Notice that

|  |
| --- |
| Notice that |
| If  🡪 ?  Else  🡪 : |

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 🡪 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");

***The print would be 🡪 2***

this ternary line can be explained by this way

DataType name = ( value a < value b) ? a : b;

condition if not (else)

if true