

# Type Test Operators

In the following lesson, you will be introduced to type test operators.

## We'll cover the following

- Syntax
- Learn by Example

`as`

`is`

`is!`

Type test operators are operators that can be used to check the type of an object at runtime. Below is a list of the type test operators supported by Dart.

Operator	Use
<code>as</code>	typecast
<code>is</code>	True if the object has the specified type
<code>is!</code>	False if the object has the specified type

We will not be looking at the `as` operator in this course.

## Syntax #

While type test operators do have two operands, the order of the operands is important. The value whose type needs to be checked should be on the left of the operator and the type itself should be on the right of the operator.

operator and the type itself should be on the right of the operator.

The basic syntax is as follows:

**value operator type**

## Learn by Example #

Let's look at some examples of how we can use type test operators in Dart.

```
main() {  
  double type1 = 5.0;  
  int type2 = 87;  
  String type3 = "educative";  
  bool type4 = true;  
  
  print(type1 is int);  
  print(type2 is int);  
  print(type3 is String);  
  print(type4 is double);  
  print(type4 is! double);  
}
```



- **Line 7** displays **false** because **type1** is of type **double** and we are asking the compiler if it is of type **int**.
- **Line 8** displays **true** because **type2** is of type **int** and we are also asking the compiler if it is of type **int**.
- **Line 9** displays **true** because **type3** is of type **String** and we are also asking the compiler if it is of type **String**.
- **Line 10** displays **false** because **type4** is of type **bool** and we are asking the compiler if it is of type **double**.
- **Line 11** displays **true** because **type4** is not of type **bool** and we are also asking the compiler if it is not of type **double**.

That sums up type test operators, let's move on to assignment operators in the next lesson.

