

# Dart – Concept of Inheritance

In Dart, one class can inherit another class i.e dart can create a new class from an existing class. We make use of **extend** keyword to do so.

## Terminology:

- **Parent Class:** It is the class whose properties are inherited by the child class. It is also known as a **base class** or superclass.
- **Child Class:** It is the class that inherits the properties of the other classes. It is also known as a **deprived class** or subclass.

```
class parent_class{  
  ...  
}  
  
class child_class extends parent_class{  
  ...  
}
```

## Instance and class methods in Dart

Dart provides us with the ability to create methods of our own. The methods are created to perform certain actions in class. Methods help us to remove the complexity of the program. It must be noted that methods may and may not return any value and also it may or may not take any parameter as input. Methods in a class can be either an object method or a class method.

There are two types of methods in Dart:

1. **Instance Method**
2. **Class Method**

## Instance Method in Dart:

Unless the method is declared as static it is classified as an instance method in a class. They are allowed to access instance variables. To call the method of this class you have to first create an object.

### Syntax:

```
// Declaring instance method
return_type method_name() {

    // Body of method
}

// Creating object
class_name object_name = new class_name();

// Calling instance method
object_name.method_name();
```

## Class Method in Dart:

All the methods declared with static keyword are termed as **class method**. They can't access non-static variables and can't invoke non-static methods of the class. It must be noted that unlike instance method class method can directly be called by using class name.

### Syntax:

```
// Creating class method
static return_type method_name() {

    // Body of method
}

// Calling class method
class_name.method_name();
```