

DART OBJECT-ORIENTED CONCEPTS

Dart is an object-oriented programming language, and it supports all the concepts of object-oriented programming such as classes, object, inheritance, mixin, and abstract classes.

- Class
- Object
- Inheritance
- Polymorphism
- Interfaces
- Abstract class

DART CLASS

- Dart classes are defined as the blueprint of the associated objects.
- A Class is a user-defined data type that describes the characteristics and behavior of it.
- To get all properties of the class, we must create an object of that class.

```
class MyClass {  
    var myName="Rabbil Hasan";  
}  
  
void main() {  
    var MyClassObj=new MyClass();  
    print(MyClassObj.myName);  
}
```

ACCESSING VARIABLE FROM CLASS

```
class MyClass {
    var myName="Rabbil Hasan";
}

void main() {
    var MyClassObj=new MyClass();
    print(MyClassObj.myName);
}
```

ACCESSING FUNCTION FROM CLASS

```
class MyClass {
    addTwoNumber(var a,var b) {
        var c=a+b;
        print(c);
    }
}

void main() {
    var MyClassObj=new MyClass();
    MyClassObj.addTwoNumber(10,20);
}
```

ACCESSING STATIC VARIABLE FROM CLASS

```
class MyClass {
    static var myName="Rabbil Hasan";
}

void main() {
    print(MyClass.myName);
}
```

ACCESSING STATIC FUNCTION FROM CLASS

```
class MyClass {
    static addTwoNumber(var a,var b) {
        var c=a+b;
        print(c);
    }
}

void main() {
    MyClass.addTwoNumber(10,20);
}
```

CLASS CONSTRUCTOR

A constructor is a different type of function which is created with same name as its class name. The constructor is used to initialize an object when it is created.

- Constructor has no return type
- Constructor can have parameter
- Constructor execute automatically

```
class MyClass {  
    MyClass(){  
        print("I am a constructor");  
    }  
}  
  
void main() {  
    new MyClass();  
}
```

DART THIS KEYWORD

- The this keyword is used to refer the current class object.
- It indicates the current instance of the class, methods, or constructor.

```
class student {
    var name="Rabbit";
    fun(){
        print(this.name);
    }
}

void main() {
    var obj=new student();
    obj.fun();
}
```