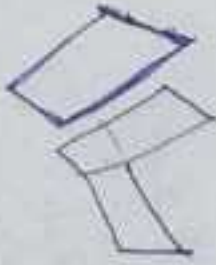


FLUTTER



Introduction:

- (*) It is a **UI Toolkit**
- (*) It is having a lot of widgets which we can customize. widgets by widgets we can make our app.
- (*) It is a software - Development Kit (SDK) by Google. It is used to build cross-platform apps like android, ios, etc.
- (*) Beginner-friendly ~~and~~ design and easy to understand code.

Dart basics:

Dart is a programming language by Google, used in flutter. It is a OOP language. syntax similar to C.

(*) use DartPad online IDE for getting hands on with Dart and flutter.

=> ①

```
void main () {  
  print ("Hello world!");  
}
```

 → Hello World!

②

```
void main () {  
  print var name = "Aditya";  
  print ("Hello $name!");  
}
```


variable can be of any datatype • Automatically infers it to be a String because Dart is strong programming language.
=> Hello Aditya!
↓
String interpolation.

③

```
void main () {  
  String name = "Aditya";  
  print ("Hello $name!");  
}
```



explicitly mentioning datatype
=> Hello Aditya!

④ We can change value of Variable:

```
void main () {  
    String name = "Aditya";  
    name = "Aman";  
    Print("Hello $name!");  
}
```

⑤ Late Variable:
It is used to declare a variable and initialize it later.

```
void main () {  
    late String name; → declared  
    name = "Aditya"; → initialized  
    Print("Hello $name!");  
}
```

 It is useful when we do not know what should be the value of our variable and we initialize it later at the end.

⑥ Final & Const:

Values once declared and initialized cannot be changed.

Built-in types

- Numbers (int, double)
- Strings (String)
- Booleans (bool)
- Lists (List, also known as arrays)
- Sets (Set)
- Maps (Map)
- Runes (Runes; often replaced by characters API)
- Symbols (Symbol)
- The value null (Null)


```

④ void main () {
    bool Pass = false;
    print ("marks: $ pass");
}

```

⇒ output : marks : false

Functions in Dart

```

void main () {
    getInfo ("Aditya", 24);
}

```

```

getInfo (String name, int age) {
    print (name);
    print (age);
}

```

⇒ output
Aditya
24

① getInfo (arguments if any) {
logic of function

② The main function will be the first fun^c to be executed.

}
↓
if we want some repeated statements to execute but not to write it again and again.

```

② void main () {
    String A = greetings ();
    int B = age ();
    print (A);
    print (B);
}

greetings () {
    return return "hello";
}

age () {
    return "15";
}

```

⇒ hello
15

Conditionals in Dart :

① if-else :

```

void main () {
    int num = 4;
    if (num > 5) { print ("Hello World"); }
}

```



```

else if (num > 3) {
    print ("hello");
}
else {
    print ("Else");
}
}

```

=> output :

Else

② switch case :

```

void main () {
    int num = 1;
    switch (num) {
        case 1:
            print ("Hello");
            break;
        case 2:
            print ("world");
            break;
        case 3:
            print ("Done");
            break;
        default:
            print ("OK");
    }
}

```

=> output :

Hello

Loops in dart :

When we need to repeat a statement again and again, we use loops.

```

void main () {
    for (var i = 0; i < 5; i++) {
        print ("Flutter is love!");
    }
}

```

=> output :

Flutter is love!
Flutter is love!
Flutter is love!
Flutter is love!
Flutter is love!