



Dart Programming Language

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- IV. Control Flow
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IV. Control Flow



If else statement

```
const animal = 'Fox';
if (animal == 'Cat' || animal == 'Dog') {
    print('Animal is a house pet.');
} else {
    print('Animal is not a house pet.');
}
```

If else-if statement

```
const trafficLight = 'yellow';
var command = '';
if (trafficLight == 'red') {
    command = 'Stop';
} else if (trafficLight == 'yellow') {
    command = 'Slow down';
} else if (trafficLight == 'green') {
    command = 'Go';
} else {
    command = 'INVALID COLOR!';
}
print(command);
```

IV. Control Flow



```
switch statement
const number = 3;
switch (number) {
  case 0:
    print('zero');
    break;
  case 1:
    print('one');
    break;
  case 2:
    print('two');
    break;
  case 3:
    print('three');
    break;
  case 4:
    print('four');
    break;
  default:
    print('something else');
}
```

Noted:

switch statement is usually faster than a series of if-else statements when there are many cases to check. This is because a switch statement uses a table lookup to determine which case to execute, while a series of if-else statements requires a linear search through each condition until a match is found.

IV. Control Flow



While Loop

```
while (condition) {  
    // loop code  
}
```

Do-while Loop

```
do {  
    // loop code  
} while (condition)
```

For Loop

```
for(Initialization; condition; incrdecr) {  
    // loop body  
}
```

For-in Loop

```
List<int> myList = [1,2 ,1, 1, 4];  
for(var num in myList){  
    print("item: $num");  
}
```

ForEach Loop

```
List<int> myList = [3,3 ,3, 4];  
myList.forEach((element) {  
    print("item: $element");  
});
```

Noted:

forEach is often faster and more efficient than using a traditional for loop, especially for large collections. This is because forEach uses an internal iterator that is optimized for performance, while a traditional for loop with an index variable may be slower due to the overhead of incrementing and checking the index variable on each iteration.

THANK YOU