

:Q1: Take a list, say for example this one

[a = [1, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89

.and write a program that prints out all the elements of the list that are less than 5

A1: Dart List Remove Elements

```
} ()void main
```

```
:[var a = [1, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89
```

```
;(a.removeWhere((element) => element > 5
```

```
;(print(a
```

```
{
```

:Q2: Take two lists, for example

[a = [1, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89

[b = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13

and write a program that returns a list that contains only the elements that are common between them (without duplicates). Make sure your program works on two lists of different sizes

A2: Dart Unique Elements

```
} ()void main
```

```
:[var a = [1, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89
```

```
:[var b = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13
```

```
;)var listCommen = a.where((element) => b.contains(element)).toSet().toList
```

```
;(print(listCommen
```

```
{
```

:Q3: Let's say you are given a list saved in a variable

[a = [1, 4, 9, 16, 25, 36, 49, 64, 81, 100

Write a Dart code that takes this list and makes a new list that has only the even elements of this list in it

A3: Dart Filter List

```
} ()void main
```

```
:[var a = [1, 4, 9, 16, 25, 36, 49, 64, 81, 100
```

```
;)a = a.where((element) => element % 2 == 0).toList
```

```
;(print(a
```

```
{
```

Q4: Write a program that takes a list of numbers for example

[a = [5, 10, 15, 20, 25

and makes a new list of only the first and last elements of the given list. For practice, write this code inside a function

A4: Dart List

```
} ()void main  
;[var a = [5, 10, 15, 20, 25
```

```
;a.removeRange(1,4
```

```
;(print(a  
{
```

OR

```
void main() {  
  List<int> a = [5, 10, 15, 20, 25];  
  List<int> result = getFirstAndLastElements(a);  
  print(result);  
}
```

```
List<int> getFirstAndLastElements(List<int> inputList) {  
  if (inputList.length < 2) {  
    throw Exception("Input list should have at least 2 elements.");  
  }
```

```
  List<int> outputList = [inputList.first, inputList.last];
```

```
  return outputList;  
}
```