

Question 1

Define an array of numbers (use any random numbers). Write a program to print only the even numbers of the array. Do not use any library functions, need to do via for loops only

```
Answer :- void main() {
    List<int> intList = [2, 4, 3, 8, 9, 1, 12];
    for(int i=0; i<intList.length; i++) {
        if(intList[i]%2==0) {
            print(intList[i]);
        }
    }
}
```

Question 2

Find the maximum consecutive 1's in an array of 0's and 1's.

Example:

a) 00110001001110 - Output :3 [Max num of consecutive 1's is 3]

b) 1000010001 - Output :1 [Max num of consecutive 1's is 1]

```
void main() {
    List<int> intList = [0,1,1,0,1,1,1,1,0,1,0,1,1,1,0];
    int maxOccurance = 0;
    int occurance = 0;
    for(int i=0; i<intList.length; i++) {
        if(intList[i]==0){
            if(maxOccurance<occurance){
                maxOccurance = occurance;
            }
            occurance = 0;
        }
        else{
            occurance++;
        }
    }
    print(maxOccurance);
}
```

Question 3

Suppose you have an array of 101 integers. This array is already sorted and all numbers in this array are consecutive. Each number only occurs once in the array except one number which occurs twice. Write a js code to find the repeated number.

e.g \$arr = array(0,1,2,3,4,5,6,7,7,8,9,10.....);

```
Void main() {
    List<int> intList = [0,1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,15,16,17];
    for(int i=0; i<intList.length-1; i++) {
```

```

    if(intList[i] == intList[i+1]) {
        print(intList[i]);
        break;
    }
}
}
}

```

Question 5

Assume there is a object of this format

```

var obj = {
  "id" : 4, "name" : "abc",
  "id" : 10, "name" : "ab2",
  "id" : 5, "name" : "abc3",
  "id" : 6, "name" : "abc5"
}

```

It can be a dictionary or java object, as per your language of choice. But its key/value pair dictionary simply.

Write a code to sort the object by id

I.e final output should have objected sort by id's

I am nnot sure if the Map that you have provide is correct.

I think it should be an array of Map.

I have solved the above question using this object:

```

var obj = [
  {
    "id": 4,
    "name": "abc"
  },
  {
    "id": 10,
    "name": "ab2"
  },
  {
    "id": 5,
    "name": "abc3"
  },
  {
    "id": 6,
    "name": "abc5"
  }
]

```

Answer :- void main() {

```

List obj = [
  {
    "id": 4, "name": "abc"

```

```

    },
    {
      "id": 10, "name": "ab2"
    },
    {
      "id": 5, "name": "abc3"
    },
    {
      "id": 6, "name": "abc5"
    }
  ];

  obj.sort((a,b)=> a["id"].compareTo(b["id"]));
  obj.forEach((element){
    print(element);
  });
}

```

Question 4

Let's see we an api url www.example.com/api/get/1

Write a sample code to call this rest api and display the result.

```

import 'dart:async';

import 'package:flutter/material.dart';
import 'package:http/http.dart' as http;

final Color darkBlue = Color.fromARGB(255, 18, 32, 47);

void main() {
  runApp(MyApp());
}

class MyApp extends StatelessWidget {
  @override

```

```

Widget build(BuildContext context) {
  return MaterialApp(
    theme: ThemeData.dark().copyWith(scaffoldBackgroundColor: darkBlue),
    debugShowCheckedModeBanner: false,
    home: Scaffold(
      body: Center(
        child: MyWidget(),
      ),
    ),
  );
}

class MyWidget extends StatelessWidget {
  String url = "https://www.example.com/api/get/1";
  Future<dynamic> getAPIResponse() async {
    http.Response response;
    try{
      response = await http.get(url);
    } on TimeoutException {
      return "Could not retrieve data from the server.";
    } catch(e){
      print(e);
    }
    return await response.body;
  }

  @override
  Widget build(BuildContext context) {
    return FutureBuilder(
      future: getAPIResponse(),
      builder: (BuildContext context, AsyncSnapshot snapshot) {
        if (snapshot != null && snapshot.hasData) {
          return Text("${snapshot.data.toString}");
        }
        return CircularProgressIndicator();
      });
  }
}

```