**Dart Codes**

**Week 1**

**Anagram.dart**

import 'dart:io';

void main() {

String str1, str2;

print("Enter first string: ");

str1 = stdin.readLineSync();

print("Enter second string: ");

str2 = stdin.readLineSync();

print("isAnamgram?? : ${isAnagram(str1, str2)}");

}

bool isAnagram(String str1, String str2) {

String normalize(String str) => (str

.toLowerCase()

.replaceAll(RegExp(r'[^a-z0-9]', caseSensitive: false), '')

.split('')

..sort()) // Cascade Notations '..' Chaining void sort()

.join('');

return normalize(str1) == normalize(str2);

}

**CustRec.dart**

class Customer {

String name;

double totalprice = 0;

List cust\_values = new List<List>();

List<Set> address = new List<Set>();

Set<String> office\_add = new Set<String>();

Set<String> resd\_add = new Set<String>();

Map<String, List> order\_details = new Map<String, List>();

List<List> product = new List<List>(); //price and product name??

Customer(String name) {

this.name = name;

}

void setrelation() {

address = [office\_add, resd\_add];

cust\_values = [address, order\_details];

}

}

void main() {

//Creating customer class objects

Customer c1 = new Customer("Abhijeet");

Customer c2 = new Customer("Yash");

//adding address details

c1.office\_add = {"ABC", "CDF"};

c1.resd\_add = {"123adv", "234rtf"};

c2.office\_add = {"adsd", "dewra"};

c2.resd\_add = {"hhajds", "sadjs"};

//adding product prices in list

c1.product.add([4000, 3400, 2000]);

c1.product.add([2200, 500, 2440]);

c1.product.add([1100, 222, 500]);

c2.product.add([2300, 4500, 2233]);

c2.product.add([2232, 2122]);

//sorting list based on prices

c1.product[0].sort((a, b) => a - b);

c1.product[1].sort((a, b) => a - b);

c1.product[2].sort((a, b) => a - b);

c2.product[0].sort((a, b) => a - b);

c2.product[1].sort((a, b) => a - b);

for (int i = 0; i < c1.product.length; i++) {

c1.totalprice += c1.product[i]

.fold(0, (previousValue, element) => previousValue + element);

}

for (int i = 0; i < c2.product.length; i++) {

c2.totalprice += c2.product[i]

.fold(0, (previousValue, element) => previousValue + element);

}

//adding product details according to orderid

c1.order\_details = {

"ORDERID001": c1.product[0],

"ORDERID002": c1.product[1],

"ORDERID003": c1.product[2]

};

c2.order\_details = {"ORDERID567": c2.product[0], "ORDERID865": c2.product[1]};

c1.setrelation();

c2.setrelation();

//Creating Map for customer records

Map<String, List> cust\_records = new Map<String, List>();

cust\_records.putIfAbsent(c1.name, () => c1.cust\_values);

cust\_records.putIfAbsent(c2.name, () => c2.cust\_values);

//ACCESS RECORDS USING CUSTOMER NAME AS THE ACCESS KEY

cust\_records.forEach((key, value) {

print("Customer name: $key");

value.forEach((element) {

if (element is List) {

print("Office address: " + element[0].toString());

print("Resedential address: " + element[1].toString());

} else

print("Customer order Records:\n $element");

});

});

print("Customer: " +

c1.name.toString() +

" Total Price: " +

c1.totalprice.toString());

print("Customer: " +

c2.name.toString() +

" Total Price: " +

c1.totalprice.toString());

}

**LeaderArray.dart**

void main() {

List<int> list = [300, 40, 60, 90, 100, 12, 16, 17, 4, 3, 5, 2];

leaders(list);

}

void leaders(List<int> arr) {

int size = arr.length;

for (int i = 0; i < size; i++) {

int j;

for (j = i + 1; j < size; j++) {

if (arr[i] < arr[j]) break;

}

if (j == size) print(arr[i].toString() + " ");

}

}

**MissingNo.dart**

void main() {

List<int> arr = [1, 2, 4, 5, 6, 7];

print("Array is $arr");

print("Missing number: ${missingNumber(arr)}");

}

int missingNumber(List<int> a) {

int total = 1;

//pick one number from known numbers and subtract one number from given numbers.

for (int i = 2; i <= a.length + 1; i++) {

total += i;

total -= a[i - 2];

}

return total;

}

**ProfParty.dart**

import 'dart:io';

void main() {

int testcases = int.parse(stdin.readLineSync());

int n;

for (int i = 0; i < testcases; i++) {

int npeople = int.parse(stdin.readLineSync());

List<int> a = new List<int>();

for (int j = 0; j < npeople; j++) {

n = int.parse(stdin.readLineSync());

a.insert(j, n);

}

if (color(a, npeople))

print("BOYS");

else

print("GIRLS");

}

}

bool color(List<int> a, int n) {

Map<int, int> colorcode = new Map<int, int>();

for (int j = 0; j < n; j++) {

if (!colorcode.containsKey(a[j]))

colorcode.putIfAbsent(a[j], () => 1);

else

return true;

}

return false;

}

**Week 2**