***ASSSINGMENT NO 4***

**Question No.1:**

How to duplicate repeating items inside a Dart list?

Problem

Consider the code:

final List<Ball> \_ballList = [Ball (), Ball (), Ball (), Ball (), Ball (),]

What can to be done in order to not repeat Ball () multiple times?

**Answer:**

void main() {

List<String> ballList = [

"bilal",

"ali",

"owais",

"hurraira",

"abdullah",

"hurraira"

];

List<String> finalList = ballList.toSet().toList();

print(finalList);

}

**Question NO.2:**

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

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

Write a code that takes this list and makes a new list that has only the

even elements of this list in it.

**Answer:**

void main() {

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

for ( var i in a )

if(i%2==0){

print(i);

}

}

**Question NO.3:**

Ask the user for a number and determine whether the number is prime or noT?

**Answer:**

import 'dart:io';

void main() {

pirnt("Enter any value");

int? num = stdin.readLineSync();

if(num %2==0)

{

print(" Not a Prime Number");

}

else {

print("Prime Number")

}

}

**Question No.4;**

Write a program to print multiplication table of 7 length 15 using loop?

**Answer:**

void main() {

var a=7;

var b=0;

for( b=0;b<=15;b++)

{

print("$a x $b =${a \* b}");

}

}

**Question No.5:**

Write a program to print items of the following array using for loop:

fruits = [“apple”, “banana”, “mango”, “orange” , “strawberry”].

**Answer:**

void main() {

var fruits = ["apple", "Bannana", "Orange", "Mango", "Strawberry"];

for (var i in fruits) {

print(i);

}

for (var i = 0; i <= fruits.length - 1; i++) {

print(fruits[i]);

}

}

**Question No.6;**

Write a program to print multiplication of 5 ranging 1 to 100.

**Answer:**

void main() {

var i = 5;

for (i; i < 100; i++) {

if (i % 5 == 0) {

print(i);

}

}

}

**Question No.7;**

The Temperature Converter: It’s hot out! Let’s make a converter

based on the steps here.

a. Store a Celsius temperature into a variable.

b. Convert it to Fahrenheit & output “NNoC is NNoF”.

c. Now store a Fahrenheit temperature into a variable.

d. Convert it to Celsius & output “NNoF is NNoC”.

**Answer:**

void main() {

var cal = 36;

print("Today Temperature in Celcius is ${cal} C");

var fer = (cal \* 9 / 5) + 32;

print("NNo$cal to NNo$fer");

print("NNo$fer to NNo$cal");

}

**Question No.8;**

Write a program to create a calculator for +, -, \*, / & % using if

statements. Take the following input:

a. First number Second number

b. Operation (+, -, \*, /, %)

Compute & show the calculated result to user.

**Answer:**

import 'dart:io';

class Add{

print("Enter First Number");

int? firstnum =stdin.readLineSync();

print("Enter Second Number");

int? secondnum =stdin.readLineSync();

var result=firstnum + secondnum;

print(result);

}

class Sub{

print("Enter First Number");

int? firstnum =stdin.readLineSync();

print("Enter Second Number");

int? secondnum =stdin.readLineSync();

var result=firstnum - secondnum;

print(result);

}

class Mul{

print("Enter First Number");

int? firstnum =stdin.readLineSync();

print("Enter Second Number");

int? secondnum =stdin.readLineSync();

var result=firstnum \* secondnum;

print(result);

}

class Div{

print("Enter First Number");

int? firstnum =stdin.readLineSync();

print("Enter Second Number");

int? secondnum =stdin.readLineSync();

var result=firstnum / secondnum;

print(result);

}

void main() {

Add a = new Add();

Sub s = new Sub();

Mul m= new Mul();

Div d= new Div();

}

**Question No:9;**

Write a program that takes a character (I. e. string of length 1)

and returns true if it is a vowel, false otherwise.

**Answer :**

void main() {

var a = "a";

if (a == "a" || a == "e" || a == "i" || a == "v" || a == "o" || a == "u") {

print("Vowel");

} else {

print("Not a Vowel");

}

}

**Question No:10;**

Write a program to reverse a string . for example, if my string is “natsikaP nawaj” then my result will be “jawan Pakistan”

**Answer :**

void main() {

String a = "jawan Pakistan";

a = String.fromCharCodes(a.codeUnits.reversed);

print(a);

}

**Question No:11;**

how are duplicates removed from a given array?

**Answer :**

void main () {

List<String> countries = [

"Ahmed",

"Bilal",

"Mohammad",

"Owais",

"Mohammad",

"Ali",

"Ahmed",

];

var seen = Set<String>();

List<String> uniquelist = countries.where((country) => seen.add(country)).toList();

print(uniquelist);

}

**Question No:12;**

Find the missing number in array of 1 to 100?

**Answer :**