**Assignment # 03**

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Answer for Q #01:

**Operators in Dart:**

1. Arithmetic Operator.
2. Logical Operators.
3. Relational Operators.

**Arithmetic Operators:**

|  |  |  |
| --- | --- | --- |
| Addition | **+** | Print (a+b); |
| Subtraction | **-** | Print (a-b); |
| Multiplication | **\*** | Print (a\*b); |
| Division | **/** | Print (a/b); |

**Logical Operators:**

|  |  |  |
| --- | --- | --- |
| && | **AND** | One or more condition is FALSE than it result is FALSE |
| || | **OR** | One or more condition is TRUE than it result is TRUE |

**Relational Operators:**

|  |  |  |
| --- | --- | --- |
| Assign | **=** | A=2 |
| Equal | **==** | Print (A==B); |
| Not Equal | **!=** | Print (A!=B); |
| Less than | **<** | Var A<B; |
| Lessthan equal to | **<=** | Var A<=B; |
| Greater than | **>** | Var A>B; |
| Greater than equal to | **>=** | Var A>=B; |

Answer for Q#02:

var t\_price = 600;

print(" Total Cost of buying 5 ticket is ${t\_price \* 5}");

**Result:** Total Cost of buying 5 ticket is 3000

Answer for Q#03:

var lst1 = [1,2,3,4,5,6,7];

var lst2 = [3,5,6,7,9,10];

var set1 = Set.from(lst1);

var set2 = Set.from(lst2);

print(List.from(set1.difference(set2)));

Answer for Q#04:

**Null operator ?**

A : B It is a simple version of if else statement. If the condition is true than A is executed else B is executed.

**Null Aware ??**

A ?? B If A is non-null returns its value else returns B value.

Answer for Q#05:

**Number:**

The number in Dart Programming is the data type that is used to hold the numeric value. Dart numbers can be classified as:

The int data type is used to represent whole numbers.

The double data type is used to represent 64-bit floating-point numbers.

The num type is an inherited data type of the int and double types.

Example:

int num1 = 2;

double num2 = 1.5;

**String:**

It used to represent a sequence of characters.

It is a sequence of UTF-16 code units. The keyword string is used to represent string literals. String values are embedded in either single or double-quotes.

Example:

String string = 'Geeks''for''Geeks';

String str = 'Coding is ';

String str1 = 'Fun';

**Boolean:**

It represents Boolean values true and false. The keyword bool is used to represent a Boolean literal in DART.

Example:

String str = 'Coding is ';

String str1 = 'Fun';

bool val = (str==str1);

**List:**

List data type is similar to arrays in other programming languages. A list is used to represent a collection of objects. It is an ordered group of objects.

Example:

List abc = new List(3);

abc[0] = 'Geeks';

abc[1] = 'For';

abc[2] = 'Geeks';

**Map:**

The Map object is a key and value pair. Keys and values on a map may be of any type. It is a dynamic collection.

Example:

Map abc = new Map();

abc['First'] = 'Geeks';

abc['Second'] = 'For';

abc['Third'] = 'Geeks';

Answer for Q#06:

var num = 7;

for (var i = 1; i <= 10; i++) {

print("$num \* $i = ${num \* i}");

Answer for Q#07:

void main() {

var emaill = stdin.readLineSync();

var pass = stdin.readLineSync();

if ((emaill == "xyz@gmail.com") && (pass == "admin123")) {

print("Login Successfully");

} else if (emaill != "xyz@gmail.com")

print("Email is incorrect");

else if (pass != "admin123")

print("Password is incorrect");

else {

print("Email and Password is incorrect");

}

}

Answer for Q#08:

List students = ["Mudabbir","Usman","Shahmeer"];

List score = [350,420,180];

var totalmarks = 500;

var per1 = score[0] / totalmarks \* 100;

var per2 = score[1] / totalmarks \* 100;

var per3 = score[2] / totalmarks \* 100;

List list1 = [students[0],score[0],per1];

List list2 = [students[1],score[1],per2];

List list3 = [students[2],score[2],per3];

print(list1);

print(list2);

print(list3);

Answer for Q#09:

**Legal variable:**

myvar = "flutter"

my\_var = " flutter "

\_my\_var = " flutter "

myVar = " flutter "

MYVAR = " flutter "

**Illegal variable:**

2myvar = " flutter"

my-var = " flutter"

my var = " flutter"

my&var = " flutter"

my/var = " flutter"

Answer for Q#10:

String str = "Hyderabad";

String result = str.replaceAll ("Hyderabad", "Islam");

print (result);

Answer for Q#11:

String name = "Syed Mudabbir";

String Currentmonth = "February";

double Nounits = 127.81;

var perunit = 50;

double nap = (Nounits \* perunit);

var lps = nap \* 10 /100;

double gap = nap + lps;

print("Customer Name = $name");

print("Current Month = $Currentmonth");

print("Number Of Units = $Nounits");

print("Charges Per Unit = $perunit");

print("Net Amount Pyabale (Within Due Date) = $nap");

print("Late Pyament Surcharge = $lps");

print("Gross Amount Payable (After Due Date) $gap");

Answer for Q#13:

**Methods of List:**

sublist()

shuffle()

reversed

asMap

whereType

**Methods of Strings:**

substring()

startsWith()

split()

replaceAll()

replaceFirst()