**Assignment 2**

Question NO:1

1. **What are the various types of operators in dart? Explain with Examples.**

**Answer:**

void main() {

var a = 5;

var b = 6;

var c = a + b;

var d = a - b;

var e = a \* b;

var f = a / b;

var g = a % b;

var h = a >= b;

var j = a <= b;

var k = a == b;

var l = a != b;

if (a > b && b < a) {

print("True");

} else {

print("And Condition Not Proved");

}

if (a > b || b < a) {

print("True");

} else {

print("OR Condition Not Proved");

}

if (!(a > b)) {

print("True");

} else {

print("Not Condition Not Proved");

}

print(c);

print(d);

print(e);

print(f);

print(g);

print(h);

print(j);

print(k);

print(l);

}

Question NO:2:

1. What will be the output in variables a, b & result after execution of the following script: a. var a = 2, b = 1; b. var result = --a - --b + ++b + b--; Explain the output at each stage: c. --a; d. --a - --b; e. --a - --b + ++b; f. --a - --b + ++b + b--;

**Answer:**

void main() {

var a = 2;

var b = 1;

var result = --a - --b + ++b + b--;

print("The Final Result is : ${result}");

var result1 = --a;

print("The result of --a is : ${result1}");

var result2 = --a - --b;

print("The result of --a - --b is : ${result2}");

var result3 = --a - --b + ++b;

print(" The result of --a - --b + ++b is : ${result3}");

var result4 = --a - --b + ++b + b--;

print("The result of --a - --b + ++b + b-- is : ${result4}");

}

Question NO:3:

(3) Cost of one movie ticket is 600 PKR. Write a script to store ticket price in a variable & calculate the cost of buying 5 tickets to a movie.

**Answer:**

void main() {

var movie\_ticket = 600;

var total = movie\_ticket \* 5;

print("Total Cost After Buying Tickets is : ${total}");

}

Question NO:7:

(7) Solve: a. First declare an array and assign the numbers of the table of 7. b. Second declare another array and assign the numbers 1-10 c. Now write down the table of 7 using map.fromiterables method.

**Answer:**

void main() {

var a = [7, 14, 21, 28, 35, 42, 49, 56, 63, 70];

var b = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10];

var c = Map.fromIterables(b, a);

print(c);

}

Question NO:8:

(8) Write a program that a. Store correct password in a JS variable. b. Asks user to enter his/her password c. Validate the two passwords: d. Check if user has entered password. If not, then give message “Please enter your password” e. Check if both passwords are same. If they are same, show message “Correct! The password you f. entered matches the original password”. Show “Incorrect password” otherwise.

**Answer:**

import 'dart:io';

void main() {

print("Enter your Your Password?");

int? password = int.parse(stdin.readLineSync()!);

if (password == 1234 || password == 0987) {

print("You Entered Correct Password");

} else {

print("You Entered Wrong password");

}

}

Question NO:12:

(12) Write a program to generate your K-Electric bill 7. All the amounts should be rounded off to 2 decimal places. Display the following fields: a. Customer Name b. Current Month c. Number of units d. Charges per unit e. Net Amount Payable (within Due Date) f. Late Payment Surcharge g. Gross Amount Payable (after Due Date) Where, Net Amount Payable (within Due Date) = Number of units \* Charges per unit & Gross Amount Payable (after Due Date) = Net Amount + Late Payment Surcharge

**Answer:**

void main() {

var units = 300;

var cpu = 20;

var netPayableAmount = units \* cpu;

var latePaymentSurcharge = netPayableAmount + 200;

print("Customer Name : Humza Khan");

print("Current Month : September");

print("Number of units : ${units}");

print("Charges per unit : ${cpu}");

print("Net Amount Payable Within Duedate is ${netPayableAmount}");

print("Gross Amount Payable After Duedate is ${latePaymentSurcharge}");

}

Question NO:4:

1. How to get difference of lists in Dart? Problem: Consider you have two lists [1,2,3,4,5,6,7] and [3,5,6,7,9,10]. How would you get the difference as output? E.g. [1, 2, 4].

**Answer:**

void main() {

var list1 = [1, 2, 3, 4, 5, 6, 7];

var list2 = [3, 5, 6, 5, 6, 7];

var list3 = list1.where((e) => !list2.contains(e)).toList();

print(list3);

}

Question NO:5:

(5)What is a difference between these operators “?? And?”

**Answer:**

void main()

{

var a;

var b=56;

var g=10;

var h=12;

//If the exp1 is not-null, returns its value, otherwise returns the exp2's value.

var c= a ?? b;

print(c);

//If the given condition is TRUE then it returns exp1 otherwise exp2.

var d= g > h? "value greatr than 10":"value lesser than 12";

print(d);

}

Question NO:9:

(9) Write a program to store 3 student names in an array. Take another array to store score of these three students. Assume that total marks are 500 for each student, display the scores & percentages of students.

**Answer:**

void main() {

List<String> name = ["Ahsan", "Saad", "Jaffar"];

List<double> score = [390, 455, 324];

double n = (score[0] / 500) \* 100;

double a = (score[1] / 500) \* 100;

double b = (score[2] / 500) \* 100;

print("${name[0]} ${score[0]} marks $n%\n"

"${name[1]} ${score[1]} marks $a%\n"

"${name[2]} ${score[2]} marks $b%\n");

}

Question NO:11:

(11) Write a program to replace the “Hyder” to “Islam” in the word “Hyderabad” and display the result.

**Answer:**

void main() {

String h = "Hyderabad";

String f = h.substring(5, 9);

String i = "Islam" + f;

print(i);

}

Question NO:10:

**Answer:**

void main()

{

//Legal Names

var a;

int num1;

String list;

List<dynamic> lis1;

Map student;

//ilLegal Names

var 1a;

var Humza;

var $a;

var final;

var if;

}