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**Assignment no 3**

**Answer no 1:**

There are few types of operator

1. Arithmetic operator
2. Relational operator
3. Logical operator

**Arithmetic operator:**  
  
in this operator you can perform mathematical calculation like +, -, \*, //.

For example:

int num1 = 1;

int num2 = 2;

int result1 = num1 + num2;

print(result1);

int num1 = 1;

int num2 = 2;

int result2 = num1 + num2;

print(result2);

int num1 = 3;

int num2 = 2;

int result3 = num1 - num2;

print(result3);

int num1 = 5;

int num2 = 6;

int result4 = num1 \* num2;

print(result4);

int num1 = 10;

int num2 = 5;

int result5 = num1 / num2;

print(result5);

int num1 = 10;

int num2 = 5;

int result6 = num1 % num2;

print(result6);

int num = 2;

int result7 = num++;

print(result7);

int num = 10;

int result8 = num--;

print(result8);

**Relational operator:**

in this operator in which you can test or define the relationship between 2 entities like >=, <=, >, <, != , ==.

For example:

int num1 = 20;

int num2 = 40;

var result1 = num1 < num2;

print(result1);

int num1 = 20;

int num2 = 40;

var result2 = num1 > num2;

print(result2);

int num1 = 20;

int num2 = 40;

var result3 = num1 == num2;

print(result3);

int num1 = 20;

int num2 = 40;

var result4 = num1 != num2;

print(result4);

int num1 = 20;

int num2 = 40;

var result5 = num1 <= num2;

print(result5);

int num1 = 20;

int num2 = 40;

var result6 = num1 >= num2;

print(result6);

**Logical operator:**

in this you can combine two or more conditions like &&, || , !.

For example:

int num1 = 20;

int num2 = 40;

var result1 = num1 > num2 && num1 >= num2 ;

print(result1);

int num1 = 60;

int num2 = 40;

var result2 = num1 < num2 || num1 <= num2 ;

print(result2);

bool status = false;

var result3 = !status;

print(result3)

**Answer no 2:**

void main(){

int ticketPrice = 600;

int noOfTickets = 5;

int totalTicketPrice = ticketPrice\*noOfTickets;

print(totalTicketPrice);

}

**Answer no 3:**

void main(){

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

var list2=[3,5,6,7,9,10];

list1.removeWhere((element) => list2.contains(element));

print(list1);

}

**Answer no 4:**

|  |  |
| --- | --- |
| ? | ?? |
| It is a simple version of if statement. If the condition is true than expersion1 is executed | If expersion1 is non-null returns its value else returns expression2 value. |

**Answer no 5:**

In dart few supported data type here

1. Number
2. Strings
3. Booleans
4. Lists
5. Maps

For example:

int number = 20;

double number2 = 40.344444;

String name = “Hello world”;

bool status = false;

num number3 = 20.34444;

num number4 = 12;

List<int> numberList = [2,3,4,5,6,7,8];

var userDetails = {‘id’:2,’name’:”Raheeb”}

**Answer no 6:**

void main(){

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

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

var result = Map.fromIterables(numbers,tableOfSeven);

print(result);

}

**Answer no 7:**

void main(){

var password = "12345";

print("Enter password:");

var inputPassword = stdin.readLineSync();

if(inputPassword != null && inputPassword.isEmpty){

print("Please enter password");

}else{

print("Enter confirm password:");

var confirmPassword = stdin.readLineSync();

if(confirmPassword != null && confirmPassword.isEmpty){

print("Please enter confirm password");

}else{

if(password == confirmPassword){

print("Correct! The password you entered match the original password.");

}else{

print("Incorrect password!");

}

}

}

}

**Answer no 8:**

void main(){

var student\_names = ["Babar","Daniyal","Raheeb"];

var total\_marks = 500;

var score = [200, 175, 300];

for(int i = 0; i < student\_names.length; i++){

print("\nStudent name: ${student\_names[i]}");

print("Obtain marks: ${score[i]} \t Total marks: $total\_marks");

var percentage = (score[i]\*100)/total\_marks;

print("Percentage: $percentage");

}

}

**Answer no 9:**

|  |  |
| --- | --- |
| **Legal variable** | **Illegal variable** |
| number | 123number |
| \_name | -name |
| firstName | First Name |
| FirstName | name\_ |
| First\_Name | result) |

**Answer no 10:**

void main(){

var input = "Hyderabad";

var result = input.replaceAll("Hyder", "Islam");

print(result);

}

**Answer no 11:**

void main(){

var customerName = "Muhammad Raheeb Siddiqui";

var currentMonth = "March";

var numberOfUnits = 309;

var chargesPerUnits = 22.88;

var netAmount=numberOfUnits\*chargesPerUnits;

var lateAmount=1000;

var grossAmount =netAmount+lateAmount;

print("````````````````````````````````````````````````````````````");

print("\t\tK Electric Bill");

print("\nName: $customerName \t Month: $currentMonth");

print("\nNumber of units: $numberOfUnits \t Charges per units: $chargesPerUnits");

print("\nNet amount (within due date): $netAmount");

print("\nGross amount(after due date): $grossAmount");

print("\n````````````````````````````````````````````````````````````");

}

**Answer no 13:**

|  |  |
| --- | --- |
| **List** | **String** |
| addAll() | toLowerCase() |
| insert() | toUpperCase() |
| insertAll() | trim() |
| forEach() | split() |
| contain() | subString() |