# DART CRASH COURSE

Variables in dart

* Var MyName = ‘mark’;(the normal way to define a variable)
* String Myname = ‘mark’(to specify the data type {string in this case})
* Int value1 = 20; (specify the data type {integer in this case})
* Dynamic Myname = ‘ sughnen’ (if you don’t know the data type you want to specify {could be anything})

Using Var is mosly preferred

Then theres

* Const (works the same way but can not be changed in the code )

DART DATA TYPES(LISTS)

Just like in python

Var myList = [1, 2, 3, 4];

To change an item in the list first grab the index of the item in the list and assign it to another value…e.g

Var MyList = [1, 2, 3, 4, 5];

myList[0] = 20;

in this case we have changed the first item in the list which has the index zero to ‘20’

CREATING AN EMPTY LIST

myList = []

just as how you can create an empty list ..you can also add items to an empty list with the add function e.g

myList.add(15)

print(myList)

output = [15]

ACCESSING AN ITEM IN A LIST USING ITS INDEX VALUE

myList = [1, 2, 3, 4]

print(myList[0])

output = 1

ADDING MULTIPLE ITEMS TO A LIST

Mylist = [];

mList.addAll([1, 2, 3, 4, 5])

print(myList);

INSERTING ITEMS TO A SPECIFIC POSITION IN A LIST

myLits = [1, 2, 3, 4]

myList.insert(3, 40)

in this case the number ‘3’ is the position(index) you are inserting to and ’40’ is the value(element).

INSERTING MANY ITEMS

myList.insertAll(1, [50, 51,52] )

in this case you are adding the values 50, 51, 52 in the 2nd index of the list in the same order …i.e if the list was like this [1, 2, 3, 4], it will change to [1, 50, 51, 52, 2, 3, 4]

REMOVING ITEMS IN A LIST

myList = [1, 2, 3, ‘mark’, ‘kaave’]

myList.remove(‘mark’);

this case only works if there’s only one instance of mark in the list i.e if there’s only only one of the item you are trying to remove.

In the case where you have 2 occurances of one item in a list and you want to remove 1 of the item, use the function …removeAt

myList.removeAt(2);

the value ‘2’ is the index position of the number you are trying to remove

# MAPS(DICTIONARIES)

Creating a map(dictionary) in Dart is just like creating a python dictionary . a map is a representation of data using key/value pairs

e.g

var ages = {‘mark’:17, ‘john’:19, ‘kay’:19};

to print all the items in the map

print(ages);

while printing specific items

print(ages[‘mark’])

in this case youre accessing the age value for ‘mark’ using the key

so the output of this code should be 17.

Now we can also print out only the values in the map(dictionary).

e.g print(ages.values);

this prints out all the values of the map ‘ages’.

You can also print out the keys in the map

E.g print(ages.keys);

To get the length of the dictionary, we use the length function

E.g print(ages.length);

Adding items to the map

Ages[‘kaave’] = 25;

In this case ‘Ages’ is the Dictionary name, [‘kaave’] is the key and ‘25’ is the value of kaave

ADDING MULTIPLE ITEMS

To achieve this, we use the addAll function used in lists.but in this case instead of using a list we create another map inside the function.

Ages.addAll({

‘john’:16,

‘phina’:20,

})

To remove from a map …we still use the remove function.

Ages.remove(‘mark’);

But in this case youre specifying the key you want to remove …in this case ‘mark’

# LOOPS IN DART

Different from python 😁

e.g num = 5;

for (var I = num; I >= 1; i--){

print(i);

in this case we are printing from 5 down to 1

so we are saying for ever item in the range of 5 if the item is greater then or equals to 1 print out the number and keep reducing ‘i—' until its equals to 1

num = 0;

for (var I =num; I <=20; i++){

print(i);

}

In this case we are saying for every number from zero, print ever number is the number is less than or equal to 0

FOR IN LOOP

Used if you want to access elements in an array

Numbers = [1, 2, 3, 4, 5]

for (number in numbers){

print(number);

}

# LOGIC

Just with the same logic idea from python just that the syntax is different

e.g lets say you want to check if a varible is equal to 5 and give out a certain output if that is the case

var number = 5;

if (number ==5){

print(‘equal’);

}

In this case youre output will be ‘equal’ because the number is equal to 5

Now to add an else statement if the number is not equal to 5;

if (number ==5){

print(‘equal’);

} else{

Print(‘not equal’)

}

# FUNCTIONS IN DART

FUNCTION TO CALCULATE THE AQUARE OF A NUMBER

Square(a){

Return a\*a

Var result = square(10);

Print(result);

In this example the code takes the value of a given and multiplies it by itself giving the square as the output

# USER INPUT IN DART

First import dart:io

Print(‘enter your name’);

Var name = stdin.readLinesync()….only takes string as an input

Print(‘hello @name’);

CLASSES IN DART

OOP(object oriented programming)