Dart language completer programming

Lecture 01

Just introduction and installing the dart language and flutter id

Lecture 02

print("first program");  
 print(4);  
 print(4 + 4);  
  
 // int  
  
 int totalstudent=10; // int literal  
 print(totalstudent);  
 print(totalstudent + 2);  
 print("the total student are $totalstudent"); // string interpolation  
   
 // double  
 double gpa;  
 gpa = 2.399873;  
 print(gpa);  
 print(gpa.toStringAsFixed(2));  
  
// string  
String name = "wasim ";  
print("welcome $name");  
  
var uniname = 'ISLAMIA'; // type inference variable cannot change value  
print(uniname);  
 print(uniname.runtimeType); // find run data type  
  
  
 dynamic khan = 5.5; // dynamic variable can change the value  
 print(khan);  
 khan = "bangash";  
 print(khan);  
  
// Arithmetic operator  
 print("Arithmetic operation");  
 print("addition ${15 + 4}");  
 print(15 - 4);  
 print(15 \* 4);  
 print(15 / 4);  
 print(15 ~/4); // ~ use for int division   
 print(15 % 4);

Lecture 03

int no1 = 16;  
 int no2 = 12;  
 print("first number $no1");  
 print("second number $no2");  
 int result = no1 + no2;  
 print("the sum is = $result");  
 result = no1 - no2;  
 print("the subtraction is = $result");

String name = ' "wasim" ';  
String name1 = " 'Haider' ";  
print(name);  
print(name1);  
print("welcome ${name + name1}");  
String address = "forest bazar 100 # agricluture uni ";  
print("this is my address :$address");  
String cnic = "14101-7934324-2";  
print(cnic);

Multiple line print with single quotation

// single third code  
var message = '''   
this is the   
first dart program   
which i write here ''';

print(message);

Multiple line print with double quotation

// double cooptation  
var reply = """   
this is the   
second dart program  
which i write here """;  
print(reply);

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Dart: input

Stdout.print ():

Stdin.readLineSync ();

Import ‘dart: io’

String name,uni;  
print('ENTER YOUR NAME ');  
name = stdin.readLineSync()!;  
print("welcome back $name");  
stdout.write ("enter your uni name ");  
uni = stdin.readLineSync()!;  
print("welcome to $uni $name ");

Rupees converts of dollars

double dollars,rate,rupee;  
stdout.write("enter rupees : ");  
rupee =double.parse(stdin.readLineSync()!);  
print("rupees exchange to dollars current rate : ");  
rate = double.parse(stdin.readLineSync()!);  
  
dollars = rupee / rate ;  
print("rupees converts to dollars are $dollars");

Dollars converts of rupees

double dollars,rate,rupee;  
stdout.write("enter dollars : ");  
dollars =double.*parse*(stdin.readLineSync()!);  
print("dollars exchange to rupees current rate are : ");  
rate = double.*parse*(stdin.readLineSync()!);  
  
rupee = dollars / rate ;  
print("dollars converts to rupees are $dollars");

Swapping the value

var a = 100;  
var b = 200;  
print("before swapping :\n a = $a \n b = $b ");  
 var temp;  
 temp = a ;  
 a = b;  
 b= temp;  
print("after swapping :\n a = $a \n b = $b ");

// converts Fahrenheit to Celsius temperature

double fah,cel;  
stdout.write("enter the temperature in fahrenheit : ");  
fah =double.parse(stdin.readLineSync()!);  
cel = (fah - 32) \* 5/9 ;  
print("temperature in celsius are : $cel ");

// converts Celsius to Fahrenheit temperature

double fah,cel;  
 stdout.write("enter the temperature in celsius : ");  
 cel =double.parse(stdin.readLineSync()!);  
 fah = (cel \* 9/5) + 32 ;  
 print("temperature in fahrenheit are : $fah ");

Lecture 04

// find the number which is greater

int n;  
print("Enter a number less than 10 : ");  
n = int.parse(stdin.readLineSync()!);  
if (n<10){  
 print("yes number is less than 10 ");  
}  
if (n==10) {  
 print("the number is equal to 10 ");  
}  
if (n>10){  
 print("no number is greater than 10 ");  
}

// multiple if statement

int no;  
print("Enter a number : ");  
no = int.parse(stdin.readLineSync()!);  
if (no==0){  
 print("the number is neutral mean zero ");  
}  
if (no<0) {  
 print("the number is negative ");  
}  
if (no>0){  
 print("the number is positive ");  
}

// user Choice (add sub multi division) program multiple if statement use here

int n1,n2,userChoice;  
 stdout.write("enter first number : ");  
 n1 = int.parse(stdin.readLineSync()!);  
  
 stdout.write("enter second number : ");  
 n2 = int.parse(stdin.readLineSync()!);  
  
 String message = '''   
 select operation   
 1 addition  
 2 subtraction  
 3 multiplication  
 4 division   
 your choice ?   
 ''';  
 print(message);  
  
 userChoice = int.parse(stdin.readLineSync()!);  
 if (userChoice == 1 ){  
 print("addition is ${n1+n2}");  
 }  
 if (userChoice == 2 ){  
 print("subtraction is ${n1-n2}");  
 }  
 if (userChoice == 3 ){  
 print("multiplication is ${n1\*n2}");  
 }  
 if (userChoice == 4 ){  
 print("division is ${n1~/n2}");  
 }  
 if (userChoice == 5 ){  
 print("user press invalid Operation ? 'please try again' ");  
 }

Lecture 05

// print Months number using (if else if else ladder) statement

int num;  
stdout.write("enter the Months number ");  
num = int.*parse*(stdin.readLineSync()!);  
if(num==1){  
 print("it's january ");  
}  
else if (num==2)  
{  
 print("it's february ");  
}  
else if(num==1){  
 print("it's january ");  
}  
else if (num==2)  
{  
 print("it's february ");  
}  
else if(num==3){  
 print("it's march ");  
}  
else if (num==4)  
{  
 print("it's april ");  
}  
else if(num==5){  
 print("it's may ");  
}  
else if (num==6)  
{  
 print("it's jun ");  
}  
else if(num==7){  
 print("it's july ");  
}  
else if (num==8)  
{  
 print("it's august ");  
}  
else if(num==9){  
 print("it's september ");  
}  
else if (num==10)  
{  
 print("it's october ");  
}  
else if(num==11){  
 print("it's november ");  
}  
else if (num==12)  
{  
 print("it's December ");  
}  
else{  
 print("invalid months number Enter between 1 to 12 ");  
}

// user Choice (add sub multi division) program if else if and else ladder statement use here

int n1,n2,userChoice;  
stdout.write("enter first number : ");  
n1 = int.*parse*(stdin.readLineSync()!);  
  
stdout.write("enter second number : ");  
n2 = int.*parse*(stdin.readLineSync()!);  
  
String message = '''   
select operation   
 1 addition  
 2 subtraction  
 3 multiplication  
 4 division   
your choice ?   
''';  
print(message);  
  
userChoice = int.*parse*(stdin.readLineSync()!);  
if (userChoice == 1 ){  
 print("addition is ${n1+n2}");  
}  
else if (userChoice == 2 ){  
 print("subtraction is ${n1-n2}");  
}  
else if (userChoice == 3 ){  
 print("multiplication is ${n1\*n2}");  
}  
else if (userChoice == 4 ){  
 print("division is ${n1~/n2}");  
}  
else {  
 print("user press invalid Operation ? 'please try again' ");  
}

// find two number which is grater

int no1,no2;  
stdout.write("enter your first number : ");  
no1= int.*parse*(stdin.readLineSync()!);  
stdout.write("enter your first number : ");  
no2= int.*parse*(stdin.readLineSync()!);  
if ( no1 > no2){  
 print("number one is grater $no1");  
}  
else{  
 print("number two is grater $no2");  
}

// find two number which is grater this is the second way

int no1,no2,large;  
stdout.write("enter your first number : ");  
no1= int.*parse*(stdin.readLineSync()!);  
stdout.write("enter your first number : ");  
no2= int.*parse*(stdin.readLineSync()!);  
if ( no1 > no2){  
 large=no1;  
}  
else{  
 large=no2;  
}  
  
print("large number is $large");

// find even & odd number using if else statement

int num;  
stdout.write("enter a number");  
num = int.*parse*(stdin.readLineSync()!);  
if (num%2==0){  
 print("even");  
}  
else {  
 print("odd");  
}

// conditional methods (ternary operators) find even and odd

int num;  
String result;  
stdout.write("enter a number : ");  
num = int.*parse*(stdin.readLineSync()!);  
result = (num%2==0) ? 'Even':'odd';  
print(result);

// switch statement find number of months

int num;  
stdout.write("enter your number ");  
num = int.*parse*(stdin.readLineSync()!);  
switch(num){  
 case 1 :  
 print("jan");  
 break;  
 case 2 :  
 print("feb");  
 break;  
 case 3 :  
 print("march");  
 break;  
 case 4 :  
 print("april");  
 break;  
 case 5 :  
 print("may");  
 break;  
 case 6 :  
 print("jun");  
 break;  
 case 7 :  
 print("july");  
 break;  
 case 8 :  
 print("august");  
 break;  
 case 9 :  
 print("september");  
 break;  
 case 10 :  
 print("october");  
 break;  
 case 11 :  
 print("November");  
 break;  
 case 12 :  
 print("December");  
 break;  
 default:  
 print("invalid months number");  
}

Lecture 06

// find three number which is grater (condition statement)

int n1,n2,n3;  
stdout.write("enter the three number : ");  
n1 = int.*parse*(stdin.readLineSync()!);  
n2 = int.*parse*(stdin.readLineSync()!);  
n3 = int.*parse*(stdin.readLineSync()!);  
// condition statement  
if ( n1 > n2 && n1 > n3){  
 print("number 1 is grater $n1");  
}  
else if (n2 > n1 && n2>n3) {  
 print("number 2 is grater $n2");  
}  
else {  
 print("number 3 is grater $n3");  
}

// find marks grade (using &&)

int marks;  
stdout.write("enter your marks : ");  
marks = int.*parse*(stdin.readLineSync()!);  
if (marks >= 80){  
 print("you have got grade A1 ");  
}  
else if (marks >70 && marks <=79 ){  
 print("you have got grade A ");  
}  
else if (marks > 60 && marks <=69 ){  
 print("you have got grade B ");  
}  
else if (marks >40 && marks <=59 ){  
 print("you have got grade C ");  
}  
else {  
 print("your failed sorry try again ! ");  
}

// find the weather in centigrade using (&&)

int centigrade;  
 stdout.write("Enter the temperature in Centigrade ");  
 centigrade = int.*parse*(stdin.readLineSync()!);  
 if ( centigrade > 35 ){  
 print("the weather is very Hot");  
 }  
 else if (centigrade <= 34 && centigrade > 24){  
 print("the weather is Hot ");  
 }  
 else if (centigrade <=24 && centigrade >= 15){  
 print("the weather is Normal ");  
 }  
 else if (centigrade <= 14 && centigrade >=5 ){  
 print("the weather is Cold ");  
 }  
else {  
 print("the weather is very Cold ");  
 }

- , + + , +

- , - - , +

// find the quadrant of this equation

int x , y ;  
stdout.write("enter the value of X ");  
x = int.*parse*(stdin.readLineSync()!);  
stdout.write("enter the value Y ");  
y = int.*parse*(stdin.readLineSync()!);  
if(x>0 && y>=0){  
 print("this is the first quadrant");  
}  
else if (x<0 && y>=0 ){  
 print("this is the second quadrant ");  
}  
else if (x<=0 && y<0 ){  
 print("this is the third quadrant ");  
}  
else if (x>0 && y<0 ){  
 print("this is the forth quadrant ");  
}  
else {  
 print("zero is the origin");  
}

// find the weather season using (|| OR)

int number;  
stdout.write("enter the value of months from 1 to 12 : ");  
number = int.*parse*(stdin.readLineSync()!);  
if (number == 12 || number == 1 || number == 2) {  
 print("winter");  
}  
else if (number == 3 || number == 4){  
 print("spring");  
}  
else if (number == 5 || number == 6 || number == 7 || number == 8 || number == 9){  
 print("summer");  
}  
else if (number == 10 || number == 11){  
 print("Autumn");  
}  
else {  
 print("invalid number you have pressed ! please try again ");  
}

// find the weather season using (swatch statement)

int n;  
stdout.write("enter the value of months from 1 to 12 : ");  
n = int.*parse*(stdin.readLineSync()!);  
switch(n){  
 case 12 :  
 case 1 :  
 case 2 :  
 print("winter");  
 break;  
 case 3 :  
 case 4 :  
 print("spring");  
 break;  
 case 5 :  
 case 6 :  
 case 7 :  
 case 8 :  
 case 9 :  
 print("summer");  
 break;  
 case 10 :  
 case 11 :  
 print("Autumn");  
 break;  
 default :  
 print("invalid number");  
}

// find vowel and consonant using (else ladder)

String alphabet;  
stdout.write("enter the alphabet : ");  
alphabet = stdin.readLineSync()!;  
if (alphabet=='b' || alphabet== 'c' || alphabet=='d' || alphabet=='f' || alphabet== 'g' || alphabet=='h'|| alphabet== 'j' || alphabet== 'k' || alphabet== 'l' || alphabet== 'm' || alphabet== 'n' || alphabet== 'p' || alphabet== 'q' || alphabet== 'r' || alphabet== 's' || alphabet== 't' || alphabet== 'v' || alphabet== 'w' || alphabet== 'x' || alphabet== 'y' || alphabet== 'z'){  
 print(" $alphabet is consonant");  
}  
else if(alphabet=='a' || alphabet== 'e' || alphabet=='i' || alphabet=='o' || alphabet== 'u') {  
 print("$alphabet is vowel");  
}  
else {  
 print("invalid alphabet ! plz try again");  
}

Lecture 07

(for loops)

// print 10 time news land Moradabad

int i ;  
for(i =1; i<11;i++){  
 print("news land moradabad $i");  
}

// enter a number to create a table

int i, num;  
stdout.write("enter the number to create a table : ");  
num = int.*parse*(stdin.readLineSync()!);  
for(i=1; i<=10; i++){  
 print('$num \* $i = ${num \* i}');  
}

// enter a number and range of table

int i, num ,range ;  
stdout.write("enter the number to create a table : ");  
num = int.*parse*(stdin.readLineSync()!);  
stdout.write("enter the range of table ");  
range = int.*parse*(stdin.readLineSync()!);  
for(i=1; i<=range; i++){  
 print('$num \* $i = ${num \* i}');  
}

// find even number 0 to 100

int i;  
for(i=0; i<=100; i=i+2) {  
 print('$i');  
}

// find odd number 0 to 100

int i;  
for(i=1; i<=100; i=i+2) {  
 print('$i');  
}

// enter the number to find factorials

int i, number ,fact=1;  
stdout.write("enter a number of factorial ");  
number = int.*parse*(stdin.readLineSync()!);  
for(i=1; i<=number; i++){  
 fact = fact\*i;  
}  
print(" $number factorial is $fact");

// find the product of two number without using \* operator

int num1, num2, answer=0;  
stdout.write("enter your first number :");  
num1 = int.*parse*(stdin.readLineSync()!);  
stdout.write("enter your second number :");  
num2 = int.*parse*(stdin.readLineSync()!);  
for(int i = 1; i<=num2; i++) {  
 answer = answer + num1;  
}  
print("without using \* operator $answer");

// square of number find

for( int i=1; i<=10; i++){  
 print("square of $i is ${i\*i}");  
}

// use loop for increment and decrement both

for (int i = 1; i <= 10; i++) {  
 print(i);  
}  
for (int i = 10; i >=0; i--) {  
 stdout.write(" $i");  
}

Lecture 08

While loop

//print 10 time news land Moradabad

int i=1;  
while(i<=10){  
 print("news land mordabad $i");  
 i++;  
}

//enter a number to generate it’s table

int num;  
stdout.write("enter the number to generate a table: ");  
num = int.*parse*(stdin.readLineSync()!);  
int i = 1;  
while (i<=10){  
 print("$num \* $i = ${num\*i}");  
 i++;  
}  
print("end of loop");

// add two number Do you want to continue statement using while loop

int num1,num2;  
String userChoice="y";  
while (userChoice == "y") { // sentinel condition  
 stdout.write("enter your first number : ");  
 num1 = int.*parse*(stdin.readLineSync()!);  
 stdout.write("enter your second number : ");  
 num2 = int.*parse*(stdin.readLineSync()!);  
 print("addition of two number is = : ${num1+num2}");  
 print("do you want to continue press y for yes and n for no ");  
 userChoice = stdin.readLineSync()!;  
}  
print("thank you for using our app ");

// add two number Do you want to continue statement using do while loop

int num1,num2;  
String userChoice;  
do {  
 stdout.write("enter your first number : ");  
 num1 = int.*parse*(stdin.readLineSync()!);  
 stdout.write("enter your second number : ");  
 num2 = int.*parse*(stdin.readLineSync()!);  
 print("addition of two number is = : ${num1 + num2}");  
  
 print("do you want to continue press y for yes and n for no ");  
 userChoice = stdin.readLineSync()!;  
}while(userChoice == "y"); // sentinel condition  
print("thank you for using our app ");

Lecture 09

//Enter a number to guess it (guess game)

import 'dart:math';// import before main()function

int randomNUm;  
int userChoice;  
int attempts=0;  
Random random =Random();  
randomNUm = random.nextInt(100)+1;  
print("A number has been generated by the system between 1 to 100 ! try to guess it ");  
while(true){  
 attempts++;  
 stdout.write("\n Guess the number : ");  
 userChoice = int.*parse*(stdin.readLineSync()!);  
 if ( userChoice>randomNUm){  
 stdout.write("your guess is high ! plz try again ");  
 }  
 else if (userChoice<randomNUm){  
 stdout.write("your choice is low ! plz try again ");  
 }  
 else {  
 break;  
 }  
}  
print("congrats you have guess the number $userChoice and $attempts attempts");  
print("thank you for using our app ");

//guess game 3 level easy normal hard

import 'dart:io';  
import 'dart:math';  
void main() {  
 String choice;  
 print("select game type ");  
 choice = '''  
 Easy  
 Normal  
 Hard  
 ''';  
 print(choice);  
 choice = stdin.readLineSync()!;  
 switch(choice) {  
 case 'Easy' :  
 int randomNum;  
 int num = 0;  
 Random random = Random();  
 randomNum = random.nextInt(100) + 1;  
 print(  
 "A number has been generate by the system between 1 to 100 ! guess the number ");  
 while (true) {  
 stdout.write("\n guess the number : ");  
 num = int.*parse*(stdin.readLineSync()!);  
 if (num > randomNum) {  
 stdout.write("your guess is high ! plz try again ");  
 }  
 else if (num < randomNum) {  
 stdout.write("your guess is low ! plz try again ");  
 }  
 else {  
 break;  
 }  
 }  
 print("congrats you have guess the number $num");  
 break;  
  
  
  
 case 'Normal' :  
 int randomNum;  
 int num=0;  
 Random random = Random();  
 randomNum = random.nextInt(5000)+1;  
 print("A number has been generate by the system between 1 to 5000 ! guess the number ");  
 while(true){  
 stdout.write("\n guess the number : ");  
 num = int.*parse*(stdin.readLineSync()!);  
 if(num > randomNum){  
 stdout.write("your guess is high ! plz try again ");  
 }  
 else if(num < randomNum){  
 stdout.write("your guess is low ! plz try again ");  
 }  
 else {  
 break;  
 }  
 }  
 print("congrats you have guess the number $num");  
 break;  
  
  
  
 case 'Hard' :  
 int randomNum;  
 int num=0;  
 Random random = Random();  
 randomNum = random.nextInt(100)+1;  
 print("A number has been generate by the system between 1 to 10000 ! guess the number ");  
 while(true){  
 stdout.write("\n guess the number : ");  
 num = int.*parse*(stdin.readLineSync()!);  
 if(num > randomNum){  
 stdout.write("your guess is high ! plz try again ");  
 }  
 else if(num < randomNum){  
 stdout.write("your guess is low ! plz try again ");  
 }  
 else {  
 break;  
 }  
 }  
 print("congrats you have guess the number $num");  
 break;  
   
 default :  
 print("invalid choice you have select plz try again ");  
 }  
}

// multiplication practice for kids

import 'dart:io';  
import 'dart:math';  
void main() {  
 Random random = Random();  
 int num1, num2,correctAnswer, userAnswer=0;  
  
 for(int i = 1; i<=12; i++){  
 num1 = random.nextInt(8)+1;  
 num2 = random.nextInt(8)+2;  
 correctAnswer = num1\*num2;  
   
 print("\n Question $i");  
 stdout.write("$num1 \* $num2 = ");  
 userAnswer = int.*parse*(stdin.readLineSync()!);  
 if (userAnswer==correctAnswer){  
 print("correct");  
 }  
 else {  
 print("wrong");  
 print('the correct answer is $correctAnswer');  
 }  
 }  
  
  
}

Lecture 10

//about lists

List<String> student=[];  
 print(student.length);  
 print(student.isEmpty);  
  
 // addition of lists  
 student.add('wasim');  
 student.add('Qaisar iqbal');  
 student.add('Asim');  
 student.add('Zafar iqbal');  
 print(student.length);  
 print(student.isEmpty);  
  
 // it's print all lists  
 print(student);  
  
 // index first print  
 print(student[0]);  
  
 // adding index  
 student.insert(1, "zia Ullah");  
 print(student);  
  
  
 // remove last index  
 student.removeLast();  
  
 // remove it index last  
 student.removeAt(0);  
 print(student);  
  
 // print first and last index  
 print (student.first);  
 print (student.last);  
print("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*");  
  
// print all lists with loops  
for ( int i = 0; i<=student.length;i++){  
 print(student[i]);  
}

// lec 10 after 16:20 minutes

// for in loop or for each loop  
List<String> student = [];  
student.add('wasim');  
student.add('asim');  
student.add('saif');  
student.add('qaisar');  
student.add('zia');  
// this is new loops  
for(var s in student){  
 print(s);  
}

// direct initialize index

var months = ['jan', 'feb', 'march','april']; // type inference  
months.add("april");  
months.add('may');  
months.insert(6, 'june');  
for (var data in months) {  
 print(data);  
}  
  
print("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*");  
  
var month = <dynamic>['jan', 'feb', 'march', 'december',3.3,45555,true]; // type inference  
for (var s in month) {  
 print(s);  
}

// key and value

var studentdata = {

// key value   
 'name' : 'wasim',  
 'course' : 'flutter',  
 'age' : '22',  
 'uni' : 'islamia'  
 };  
print(studentdata['name']);  
print(studentdata);

Lecture 11

Function

void main() {  
 printStar();  
print("Hello");  
printStar();  
printStar();  
// function calling  
printMSymbol('7');  
print('');  
printMSymbol('#');  
print('');  
sum(4, 6);  
sum(456, 78);  
sum(445, 645); // sum function call   
table(7); // table function call   
  
}  
// this is function declaration  
void printStar(){  
 print("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*");  
}  
// this is another function declaration  
void printMSymbol(String symbol) {  
 for (int i = 0; i < 41; i++) {  
 stdout.write(symbol);  
 }  
}  
// this is another function declaration  
void sum(int x, int y){  
 print("sum of $x + $y = ${x+y}");  
}  
  
  
// print the table  
void table(int num){  
 for(int i =1; i<=10; i++){  
 print(" $num \* $i = ${num\*i} ");  
 }  
}

After 22 minutes lecture 10 practice

Find the cube of number in function

void main() {  
 // square function call  
 sqare(9);  
 cube(9); // cube function call  
}  
  
// square function declaration  
void sqare(int num){  
 print("square of $num is ${num\*num}");  
}  
// another way to declaration of function  
// => this arrow is fate arrow sign  
void cube(int num) => print("cube of $num is ${num\*num\*num}");

Write a function that print the largest of two number and

Find the factorial of number

void main() {  
findMax(99, 77); // max function call  
fact(5); // factorial function call   
}  
// function two largest number find  
void findMax(int x, int y){  
 if (x>y){  
 print("x is grater $x than y ");  
 }  
 else {  
 print("y is grater $y than x ");  
 }  
}  
// function find factorial of num  
void fact(int num){  
 int f=1;  
 for(int i =1;i<=num;i++){  
 f=f\*i;  
 }  
 print("factorial of number $num is $f");  
}

// write a function that find four number of sum

void main() {  
 findSum(45, 45, 45, 45);  
}  
  
// function that find the sum of four numbers  
void findSum(int a, int b,int c, int d){  
 print("sum of four number $a + $b + $c +$d are ${a+b+c+d}");  
}

// write a function that temperature convert (f to c) and (c to f)

void main() {  
celsius(8.45666);  
fahrenheit(48);  
}  
// c convert to f  
void celsius(double cel){  
 double f;  
 f = (cel \* 9/5) + 32 ;  
 print("the temperature convert celsius to fahrenheit are $f");  
}  
// f convert to c  
void fahrenheit(int fah){  
 double cel;  
 cel = (fah -32)\* 5/9 ;  
 print("the temperature convert fahrenheit to celsius are $cel");  
}

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- , - - , +

// write a function that find the quadrant of this equation

void main() {  
quadrant(98, 34);  
quadrant(-45, 34);  
quadrant(-78, -34);  
quadrant(98, -54);  
quadrant(0, 0);  
}  
  
// write a function that find the quadrant  
void quadrant(int x , int y){  
 if(x>0 && y>=0){  
 print("this is the first quadrant");  
 }  
 else if (x<0 && y>=0 ){  
 print("this is the second quadrant ");  
 }  
 else if (x<=0 && y<0 ){  
 print("this is the third quadrant ");  
 }  
 else if (x>0 && y<0 ){  
 print("this is the forth quadrant ");  
 }  
 else {  
 print("zero is the origin");  
 }  
}

// required function naming program

void main() {  
 printTable(num: 4, range: 4);  
}  
void printTable({required int num, required int range}){  
 for(int i = 0; i<=range; i++){  
 print("$num \* $i = ${num\*i}");  
 }  
}

Lecture 12

// return function find max number

void main() {  
int x,y;  
x=8;  
y=9;  
print(max(x, y));  
}  
int max(int x , int y){  
 return (x>y)? x : y ;  
}

// return function find months in switch case

void main(){  
 print(Months(1));  
 print(Months(7));  
 print(Months(15));  
  
}  
String Months(int num)  
{  
 switch(num){  
 case 1 :  
 return 'jan';  
 break;  
 case 2 :  
 return 'feb';  
 break;  
 case 3 :  
 return 'march';  
 break;  
 case 4 :  
 return 'april';  
 break;  
 case 5 :  
 return 'may';  
 break;  
 case 6 :  
 return 'jun';  
 break;  
 case 7 :  
 return 'july';  
 break;  
 default :  
 return "invalid value ";  
 }  
}

// find power of number

void main(){  
 print(pow(2, 3)); // this is the builtin form   
 print( findPow(2, 3));  
  
}  
int findPow(int x, int y){  
 return y = x\*x\*x;  
}

Lecture 13

Class

// creating class

class Book{ // creating class   
 String author ='';  
 String title ='';  
 int pages = 0;  
 double price = 0.0;  
}  
void main()  
{  
Book cpp;  
cpp = Book();  
cpp.author='wasim badami'; // initialize statement  
cpp.title="learn programming";  
cpp.pages =33;  
cpp.price = 300.5;  
  
print(cpp.author); // printing statement  
print(cpp.pages);  
  
// creating second objects  
Book dart;  
dart = Book();  
dart.author='Qaisar iqbal'; // initialize statement  
dart.pages=500;  
dart.price=700;  
dart.title ='how to learn dart language';  
  
print(dart.title); // printing statement  
print(dart.price);  
}