import 'dart:io';

void main() {

\\ your age output

  print('Enter your age :');

  var birth\_year = stdin.readLineSync(); // enter your age

  var age = DateTime.now().year - int.parse(birth\_year!); // your birthday

  print('your age is : $age');

}

\\ your age output

// where function

void main() {

  var a1 = [1, 2, 3, 4, 5, 6, 7];

  // print(a1);

  var b1 = a1.where((element) => element % 2 == 0);

  // b1.forEach((element) {print(element);});

  var b2 = a1.firstWhere((element) => element % 2 == 0);

  var b3 = a1.lastWhere((element) => true);

  // first index where function

  var c1 = a1.indexWhere((element) => element % 2 == 0);

  // last index where function

  var c2 = a1.lastIndexWhere((element) => element > 4);

  var d1 = a1.whereType<double>();

  print(b1);

  print(b2);

  print(b3);

  print(c1);

  print(c2);

  print(d1);

}

// where function

void main() {

  var a1 = [1, 2, 3, 4, 5, 6, 7];

  a1.removeWhere((element) => element % 2 == 0);

  // a1.retainWhere((element) => element % 2 == 0);

  print('a1 = $a1');

  // var b1 = a1.where((element) => element % 2 == 0);

  // print('b1 = $b1');

  // b1.forEach((element) {print(element);});

  var b2 = a1.firstWhere((element) => element % 2 == 0, orElse: () => 0);

  print('b2 = $b2');

  // var b3 = a1.lastWhere((element) => true);

  // print('b3 = $b3');

  // first index where function

  // var c1 = a1.indexWhere((element) => element % 2 == 0);

  //   print('c1 = $c1');

  // last index where function

  var c2 = a1.lastIndexWhere(

      (element) => element > 4, 2); // the beginning of the search is number 2

  print('c2 = $c2');

  // var d1 = a1.whereType<double>();

  // print('d1 = d1');

// if it is not singel value an error is given

  // var g1 = a1.singleWhere((element) => element >= 7);

  // print('g1 = $g1');

// if it is not singel value this code

  var g2;

  try {

    g2 = a1.singleWhere((element) => element % 2 == 0);

  } catch (\_) { g2 = 0; }

  print('g2 = $g2');

}

// Iterable :

// object contains Data that can be iterable Upon

// Examples (string, list, set, map)

void main() {

  //var l = [1, 2, 3, 4, 5, 6, 7];

  Iterable<int> l = [1, 2, 3, 4, 5, 6, 7];

  var b = l.toList();

  b.forEach((element) {

    print(element);

  });

  var li = [

    [1, 2, 3, 4, 5, 6],

    [7, 8, 9, 10, 11]

  ];

  var m = {1, 2, 3, 4, 5, 6, 7}; // set

  var n = {9: 'a', 10: 'b', 11: 'c'}; // map

  // for (var element in li) {

  //   for (var item in element) {

  //     print(item);

  //   }

  // }

  var list = [1, 2, 3];

  var list2 = [0, ...list, 4, 5];

  var list3 = [0, list, 4, 5];

  var list4 = [0, if (list.length == 3) ...list, 4, 5];

  var a = null;

  var list5 = [0, ...?a, 4, 5]; // ? so that no error occurs

  print(list2);

  print(list3);

  print(list4);

  print(list5);

  var a1 = [1.2, 0, 1, 3.5, 7];

  a1.any((element) => element % 2 == 0); // output jast true or falst

  var sum = 0.0;

  List c = a1.map((e) {

    sum = sum + e;

    return (e);

  }).toList();

  print(c);

  print(sum);

  var arr = [

    [11, 2, 5]

  ];

  var sum = 0.0;

  List l = arr[0].map((e) {

    sum = sum + e;

    return (e);

  }).toList();

  print(l);

  print(sum);

}

import 'dart:io';

void main() {

  print(Platform.executable);

  print(Platform.numberOfProcessors);

  print(Platform.operatingSystem);

  print(Platform.operatingSystemVersion);

  print(Platform.script);

  print(Platform.version);

  print('-----------------------------');

  print(Platform.isAndroid);

  print(Platform.isFuchsia);

  print(Platform.isIOS);

  print(Platform.isLinux);

  Platform.isMacOS? print('is macos'): print('is not macos');

  print(Platform.isWindows);

  print('-------------------------------');

  // Platform.environment.forEach((key, value) {

  //   print('$key : $value ');

  // });

  // Platform.environment.forEach((key, \_) {

  //   print('$key : ${Platform.environment[key]} ');

  // });

}

void main() {

  //\*\*\*\* extension function  \*/

  // print(int.parse('2') + 5);

  print(NumberPorsing('2').ParseInt() + 5);

}

//\*\*\*\* extension function  \*/

extension NumberPorsing on String {

  int ParseInt() {

    return int.parse(this);

  }

}

// \*\*\*\* Dart Soundness Null Safety \*\*\*\*//

void main() {

  String? colorFavorite = 'blak';

  setBackgroundColor(colorFavorite);

}

String BackgrounColer = "";

setBackgroundColor(String? color) {

  if (color == null) return;

  BackgrounColer = color;

  print(BackgrounColer);

}

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

void main() {

  var hassan = Person();

  print(hassan.age);

  print(hassan.favoriteColer);

  hassan.favoriteColer = "red";

  setBackgroundColor(hassan.favoriteColer!);

}

class Person {

  late int age;

  String? favoriteColer = null;

  Person() {

    age = age + 2;

  }

}

setBackgroundColor(String color) {

  print(color);

}