import 'dart:io';

void main() {

  print('Enter your age :');

  var birth\_year = stdin.readLineSync();

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

  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);

}