Question no 01

void main() {

print("Welcome to Programming!");

}

Question no 02

import 'dart:io';

void main() {

stdout.write('Enter the first number: ');

double num1 = double.parse(stdin.readLineSync()!);

stdout.write('Enter the second number: ');

double num2 = double.parse(stdin.readLineSync()!);

double sum = num1 + num2;

double difference = num1 - num2;

double product = num1 \* num2;

double quotient = num1 / num2;

print('Sum: $sum');

print('Difference: $difference');

print('Product: $product');

print('Quotient: $quotient');

}

Question no 03

import 'dart:io';

void main() {

stdout.write('Enter a number: ');

int number = int.parse(stdin.readLineSync()!);

if (number % 2 == 0) {

print('$number is even.');

} else {

print('$number is odd.');

}

}

Question no 04

import 'dart:io';

void main() {

stdout.write('Enter the first number: ');

double num1 = double.parse(stdin.readLineSync()!);

stdout.write('Enter the second number: ');

double num2 = double.parse(stdin.readLineSync()!);

stdout.write('Enter the third number: ');

double num3 = double.parse(stdin.readLineSync()!);

double largest = num1;

if (num2 > largest) {

largest = num2;

}

if (num3 > largest) {

largest = num3;

}

print('The largest number is: $largest');

}

Question no 05

import 'dart:io';

void main() {

stdout.write('Enter the first number: ');

int a = int.parse(stdin.readLineSync()!);

stdout.write('Enter the second number: ');

int b = int.parse(stdin.readLineSync()!);

print('Before swapping: a = $a, b = $b');

a = a + b;

b = a - b;

a = a - b;

print('After swapping: a = $a, b = $b');

}

Question no 06

import 'dart:io';

void main() {

stdout.write('Enter the principal amount (P): ');

double principal = double.parse(stdin.readLineSync()!);

stdout.write('Enter the rate of interest (R): ');

double rate = double.parse(stdin.readLineSync()!);

stdout.write('Enter the time period (T) in years: ');

double time = double.parse(stdin.readLineSync()!);

double simpleInterest = (principal \* rate \* time) / 100;

print('Simple Interest is: $simpleInterest');

}

Question no 07

import 'dart:io';

void main() {

stdout.write('Enter a string: ');

String input = stdin.readLineSync()!;

String reversed = input.split('').reversed.join('');

print('Reversed string: $reversed');

}

Question no 08

import 'dart:io';

void main() {

stdout.write('Enter a year: ');

int year = int.parse(stdin.readLineSync()!);

if ((year % 4 == 0 && year % 100 != 0) || (year % 400 == 0)) {

print('$year is a leap year.');

} else {

print('$year is not a leap year.');

}

}

Question no 09

import 'dart:io';

void main() {

stdout.write('Enter a number: ');

int number = int.parse(stdin.readLineSync()!);

for (int i = 1; i <= 10; i++) {

print('$number x $i = ${number \* i}');

}

}

Question no 10

import 'dart:io';

void main() {

stdout.write('Enter an integer: ');

int number = int.parse(stdin.readLineSync()!);

int count = number.abs().toString().length;

print('The number of digits in $number is: $count');

}

Question no 11

import 'dart:io';

void main() {

stdout.write('Enter a value: ');

String? input = stdin.readLineSync();

if (input == null || input.trim().isEmpty) {

print('The input is a null value or empty.');

} else {

int? number = int.tryParse(input);

if (number != null) {

print('The input is an integer number: $number');

} else {

print('The input is not an integer.');

}

}

}