
2.1. W.A.P. to count number of even or odd number from an array of n numbers. (A)**Code:**

```
import 'dart:io';

void main() {
  stdout.write("Enter the number of elements: ");
  int n = int.parse(stdin.readLineSync()!);

  List<int> numbers = [];

  for (int i = 0; i < n; i++) {
    stdout.write("Enter number ${i + 1}: ");
    int num = int.parse(stdin.readLineSync()!);
    numbers.add(num);
  }

  int evenCount = 0;
  int oddCount = 0;

  for (int i in numbers) {
    if (i % 2 == 0) {
      evenCount++;
    } else {
      oddCount++;
    }
  }

  print("Number of even numbers: $evenCount");
  print("Number of odd numbers: $oddCount");
}
```



Output:

```
Terminal Local x + v
PS D:\Flutter_Projects\diploma_sem5_practicals\lib\Lab2> dart Practical1.dart
Enter the number of elements: 4
Enter number 1: 1
Enter number 2: 2
Enter number 3: 3
Enter number 4: 4
Number of even numbers: 2
Number of odd numbers: 2
PS D:\Flutter_Projects\diploma_sem5_practicals\lib\Lab2>
```

diploma_sem5_practicals > lib > Lab2 > Practical1.dart

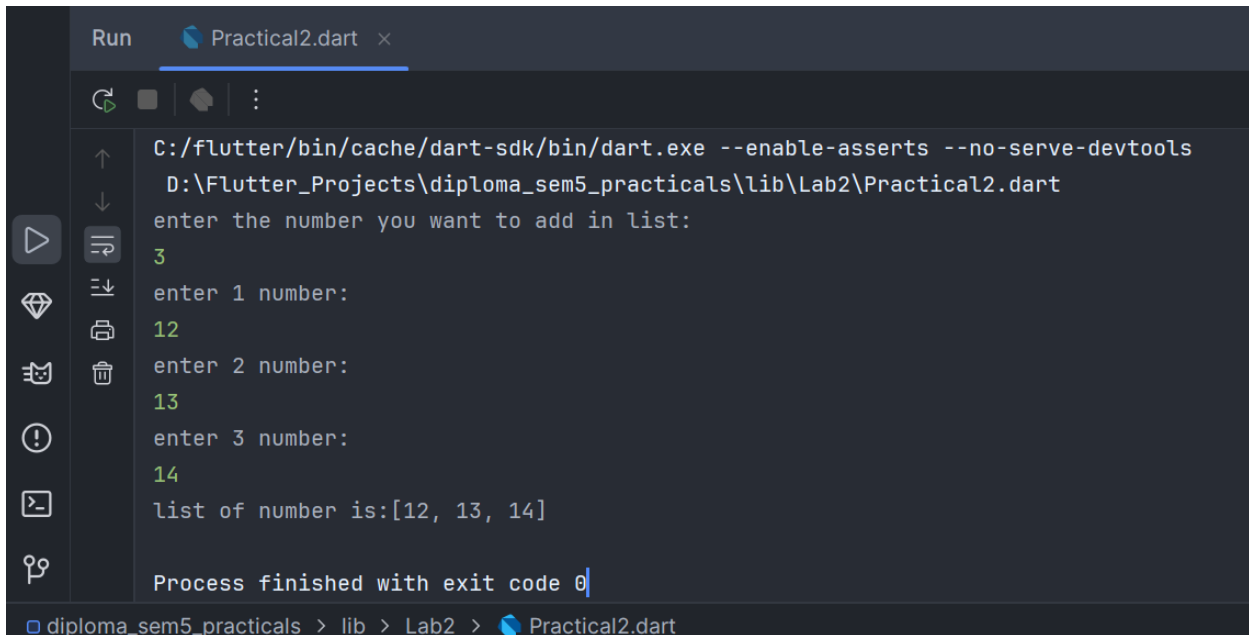
2.2. W.A.P. to insert int numbers into List and display in terminal. (A)

Code:

```
import "dart:io";

void main() {
  List<int> lst = [];
  print("enter the number you want to add in list:");
  int n = int.parse(stdin.readLineSync()!);
  for (int i = 0; i < n; i++) {
    print("enter ${i + 1} number:");
    int num = int.parse(stdin.readLineSync()!);
    lst.add(num);
  }
  print("list of number is:$lst");
}
```

Output:



```
Run Practical2.dart x
C:/flutter/bin/cache/dart-sdk/bin/dart.exe --enable-asserts --no-serve-devtools
D:\Flutter_Projects\diploma_sem5_practicals\lib\Lab2\Practical2.dart
enter the number you want to add in list:
3
enter 1 number:
12
enter 2 number:
13
enter 3 number:
14
list of number is:[12, 13, 14]
Process finished with exit code 0
diploma_sem5_practicals > lib > Lab2 > Practical2.dart
```

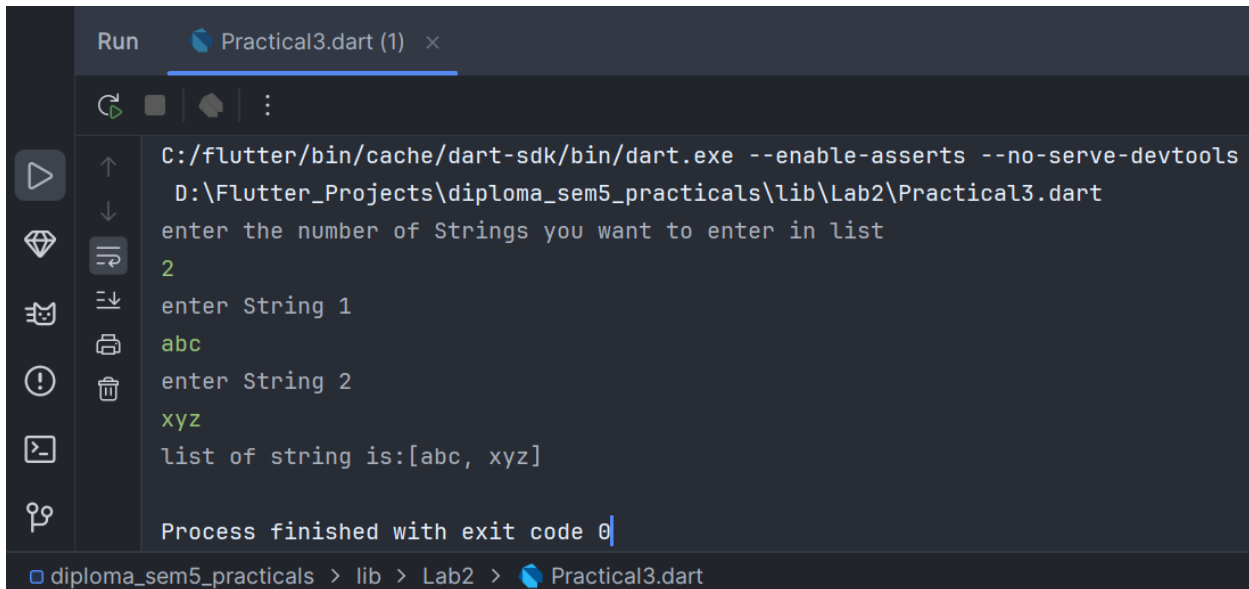
2.3. W.A.P. to insert Strings into List and display in terminal. (A)

Code:

```
import "dart:io";

void main() {
  print("enter the number of Strings you want to enter in list");
  int n = int.parse(stdin.readLineSync()!);
  List<String> lst = [];
  for (int i = 0; i < n; i++) {
    print("enter String ${i + 1}");
    String str = stdin.readLineSync()!;
    lst.add(str);
  }
  print("list of string is:$lst");
}
```

Output:



```
Run Practical3.dart (1) x
C:/flutter/bin/cache/dart-sdk/bin/dart.exe --enable-asserts --no-serve-devtools
D:\Flutter_Projects\diploma_sem5_practicals\lib\Lab2\Practical3.dart
enter the number of Strings you want to enter in list
2
enter String 1
abc
enter String 2
xyz
list of string is:[abc, xyz]
Process finished with exit code 0
diploma_sem5_practicals > lib > Lab2 > Practical3.dart
```

2.4. W.A.P. to insert double into List and display in terminal and do sum of all numbers and print it with 2 decimal only. Ex: Total = 22.39998 => 22.40 (A)

Code:

```
import "dart:io";

void main() {
  print("Enter the number of item you want to add in list ");
  int n = int.parse(stdin.readLineSync()!);
  List<double> lst = [];
  for (int i = 0; i < n; i++) {
    print("enter ${i + 1} value");
    double num = double.parse(stdin.readLineSync()!);
    lst.add(num);
  }
  print("list of double numbers is:$lst");
  double total = 0;
  for (double i in lst) {
    total += i;
  }
  // double ans = lst.reduce((a, b) => a + b);

  print("total of list of double numbers is:${total.toStringAsFixed(2)}");
}
```

Output:

```
Run Practical4.dart x
C:/flutter/bin/cache/dart-sdk/bin/dart.exe --enable-asserts --no-serve-devtools
D:\Flutter_Projects\diploma_sem5_practicals\lib\Lab2\Practical4.dart
Enter the number of item you want to add in list
2
enter 1 value
12.2
enter 2 value
13.3
list of double numbers is:[12.2, 13.3]
total of list of double numbers is:25.50
Process finished with exit code 0
diploma_sem5_practicals > lib > Lab2 > Practical4.dart
```

2.5. W.A.P. to sort values in List. Ex. Input : [13, 2, -11, 142, -389, 0] Result: [- 389, -11, 0, 2, 13, 142] (B)

Code:

```
import "dart:io";

void main() {
  print("enter number of element you want to add in list");
  int n = int.parse(stdin.readLineSync()!);
  List<int> lst = [];
  for (int i = 0; i < n; i++) {
    print("enter ${i + 1} value");
    int num = int.parse(stdin.readLineSync()!);
    lst.add(num);
  }
  print("without sorting list:$lst");
  // lst.sort();
  for (int i = 0; i < lst.length - 1; i++) {
    for (int j = 0; j < lst.length - i - 1; j++) {
      if (lst[j] > lst[j + 1]) {
        int temp = lst[j];
        lst[j] = lst[j + 1];
        lst[j + 1] = temp;
      }
    }
  }
  print("After sorting list is:$lst");
}
```

Output:

```
Run Practical5.dart x
C:/flutter/bin/cache/dart-sdk/bin/dart.exe --enable-asserts --no-serve-devtools
D:\Flutter_Projects\diploma_sem5_practicals\lib\Lab2\Practical5.dart
enter number of element you want to add in list
3
enter 1 value
-34
enter 2 value
34
enter 3 value
5
without sorting list:[-34, 34, 5]
After sorting list is:[-34, 5, 34]
Process finished with exit code 0
diploma_sem5_practicals > lib > Lab2 > Practical5.dart
```