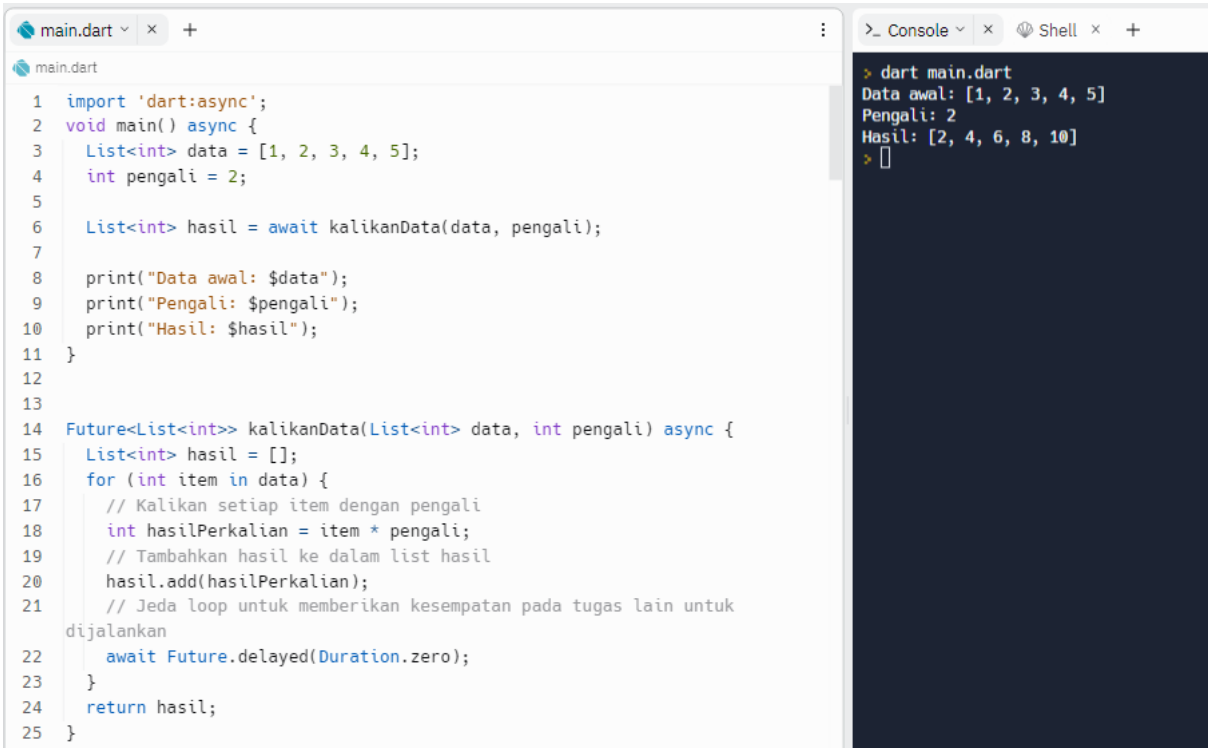
Screenshoot soal prioritas 1

Nomor 1

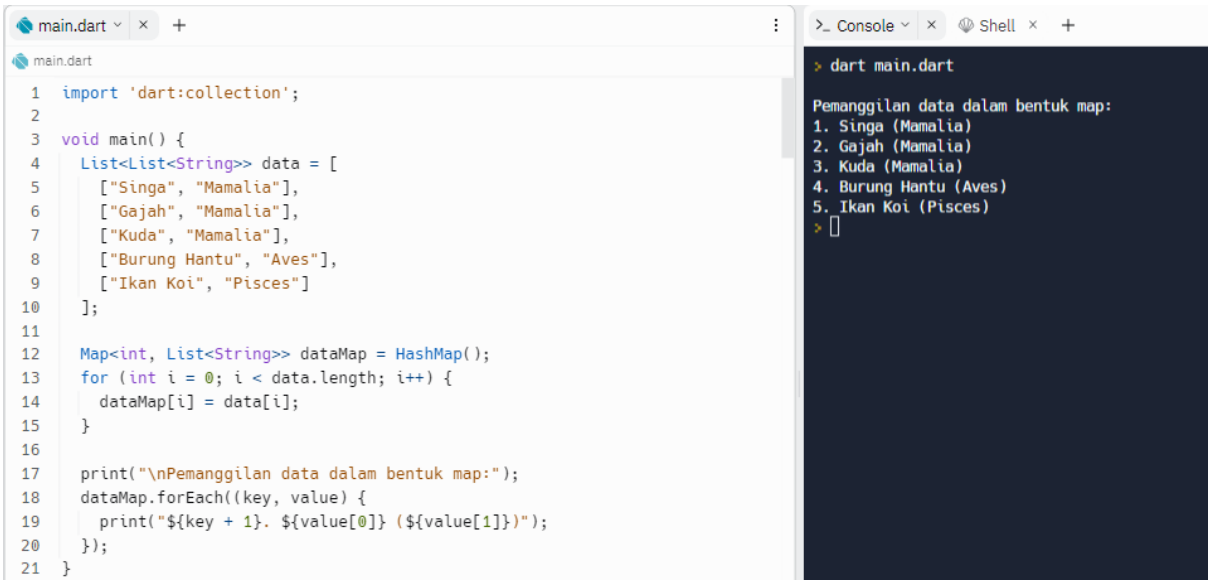


```dart
import 'dart:async';
void main() async {
  List<int> data = [1, 2, 3, 4, 5];
  int pengali = 2;

  List<int> hasil = await kalikanData(data, pengali);

  print("Data awal: $data");
  print("Pengali: $pengali");
  print("Hasil: $hasil");
}


Future<List<int>> kalikanData(List<int> data, int pengali) async {
  List<int> hasil = [];
  for (int item in data) {
    // Kalikan setiap item dengan pengali
    int hasilPerkalian = item * pengali;
    // Tambahkan hasil ke dalam list hasil
    hasil.add(hasilPerkalian);
    // Jeda loop untuk memberikan kesempatan pada tugas lain untuk dijalankan
    await Future.delayed(Duration.zero);
  }
  return hasil;
}
```

```
> dart main.dart
Data awal: [1, 2, 3, 4, 5]
Pengali: 2
Hasil: [2, 4, 6, 8, 10]
>
```

Screenshoot soal prioritas 2

Nomor 1



```dart
import 'dart:collection';

void main() {
  List<List<String>> data = [
    ["Singa", "Mamalia"],
    ["Gajah", "Mamalia"],
    ["Kuda", "Mamalia"],
    ["Burung Hantu", "Aves"],
    ["Ikan Koi", "Pisces"]
  ];

  Map<int, List<String>> dataMap = HashMap();
  for (int i = 0; i < data.length; i++) {
    dataMap[i] = data[i];
  }

  print("\nPemanggilan data dalam bentuk map:");
  dataMap.forEach((key, value) {
    print("${key + 1}. ${value[0]} (${value[1]})");
  });
}
```

```
> dart main.dart

Pemanggilan data dalam bentuk map:
1. Singa (Mamalia)
2. Gajah (Mamalia)
3. Kuda (Mamalia)
4. Burung Hantu (Aves)
5. Ikan Koi (Pisces)
>
```

Nomor 2

```dart
import 'dart:math';

void main() {
  List<int> nilai = [7, 5, 3, 5, 2, 1];
  int total = 0;
  for (int i = 0; i < nilai.length; i++) {
    total += nilai[i];
  }
  double rataRata = total / nilai.length;
  int rataRataBulat = rataRata.ceil();
  print("Nilai: $nilai");
  print("Rata-rata (pembulatan ke atas): $rataRataBulat");
}
```

```
> dart main.dart
Nilai: [7, 5, 3, 5, 2, 1]
Rata-rata (pembulatan ke atas): 4
>
```

Nomor 3

```dart
import 'dart:io';

void main() {
  stdout.write("Masukkan bilangan bulat: ");
  int n = int.parse(stdin.readLineSync()!);

  int hasil = faktorial(n);
  print("Faktorial dari $n adalah $hasil");
}

int faktorial(int n) {
  int hasil = 1;
  for (int i = 2; i <= n; i++) {
    hasil *= i;
  }
  return hasil;
}
```

```
> dart main.dart
Masukkan bilangan bulat: 5
Faktorial dari 5 adalah 120
>
```

Screenshoot soal eksplorasi

Nomor 1

```dart
void main() {
  List<String> data = ["amuse", "tommy kaira", "spoon", "HKS",
"litchfield", "amuse","HKS"];
  Set<String> dataSet = Set.from(data);
  List<String> dataUnik = dataSet.toList();
  print("Sampel Input: $data");
  print("Sampel Output: $dataUnik");
}
```

```
> dart main.dart
Sampel Input: [amuse, tommy kaira, spoon, HKS, litchfield, amuse, HKS]
Sampel Output: [amuse, tommy kaira, spoon, HKS, litchfield]
>
```

```dart
void main() {
  List<String> data = ["JS Racing", "amuse", "spoon", "spoon", "JS
Racing", "amuse"];
  Set<String> dataSet = Set.from(data);
  List<String> dataUnik = dataSet.toList();
  print("Sampel Input: $data");
  print("Sampel Output: $dataUnik");
}
```

```
> dart main.dart
Sampel Input: [JS Racing, amuse, spoon, spoon, JS Racing, amuse]
Sampel Output: [JS Racing, amuse, spoon]
>
```

Nomor 2

main.dart

```dart
void main() {
  List<String> data = ["js", "js", "js", "golang", "python", "js", "js",
"golang", "rust"];
  Map<String, int> frekuensi = {};
  for (int i = 0; i < data.length; i++) {
    if (frekuensi.containsKey(data[i])) {
      frekuensi[data[i]] = frekuensi[data[i]]! + 1;
    } else {
      frekuensi[data[i]] = 1;
    }
  }
  print("Data: $data");
  print("Frekuensi: $frekuensi");
}
```

Console Shell

```
> dart main.dart
Data: [js, js, js, golang, python, js, js, golang, rust]
Frekuensi: {js: 5, golang: 2, python: 1, rust: 1}
>
```