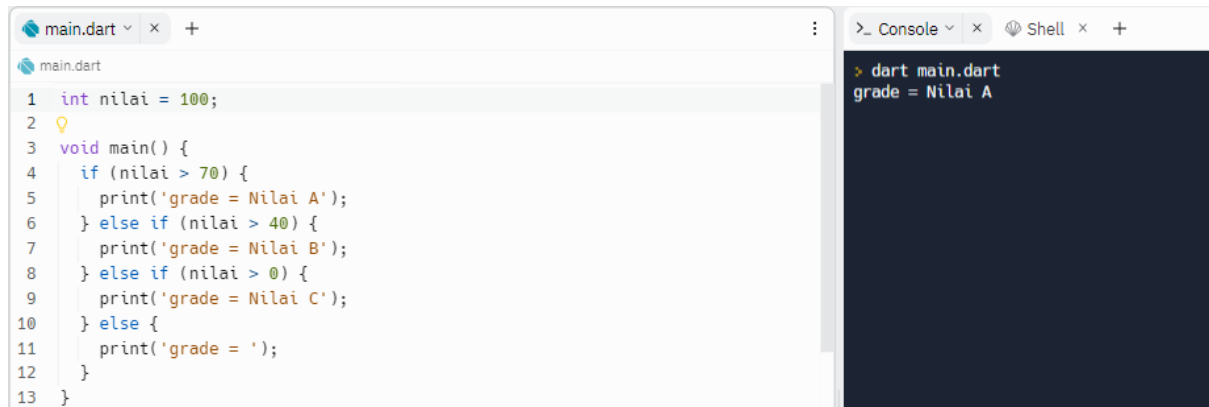


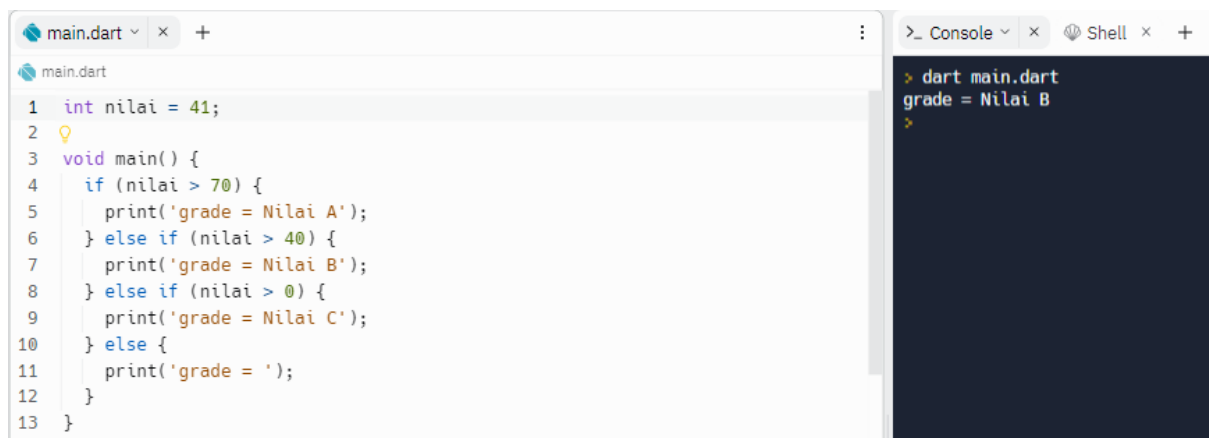
## Screenshoot soal prioritas 1

### Nomor 1



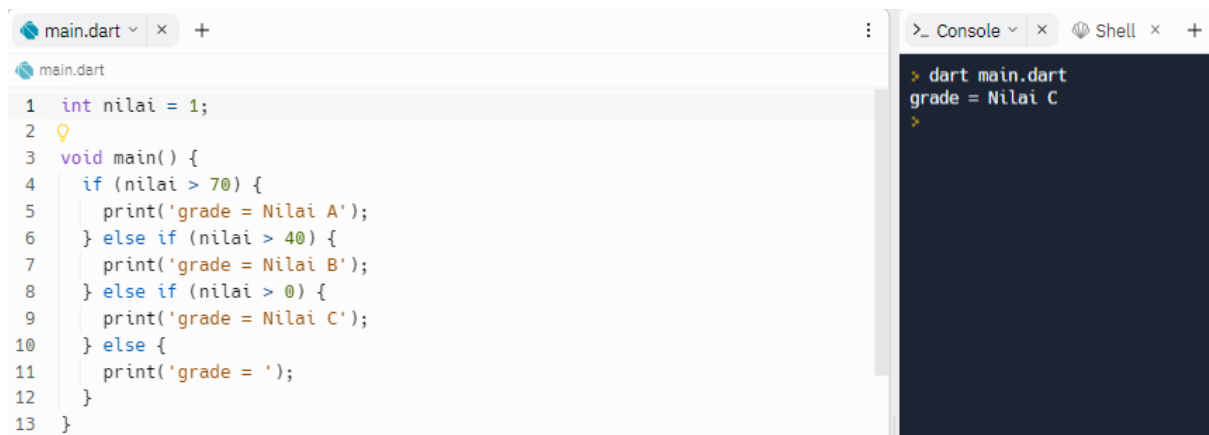
```
main.dart
1 int nilai = 100;
2
3 void main() {
4   if (nilai > 70) {
5     print('grade = Nilai A');
6   } else if (nilai > 40) {
7     print('grade = Nilai B');
8   } else if (nilai > 0) {
9     print('grade = Nilai C');
10  } else {
11    print('grade = ');
12  }
13 }
```

```
>_ Console
> dart main.dart
grade = Nilai A
```



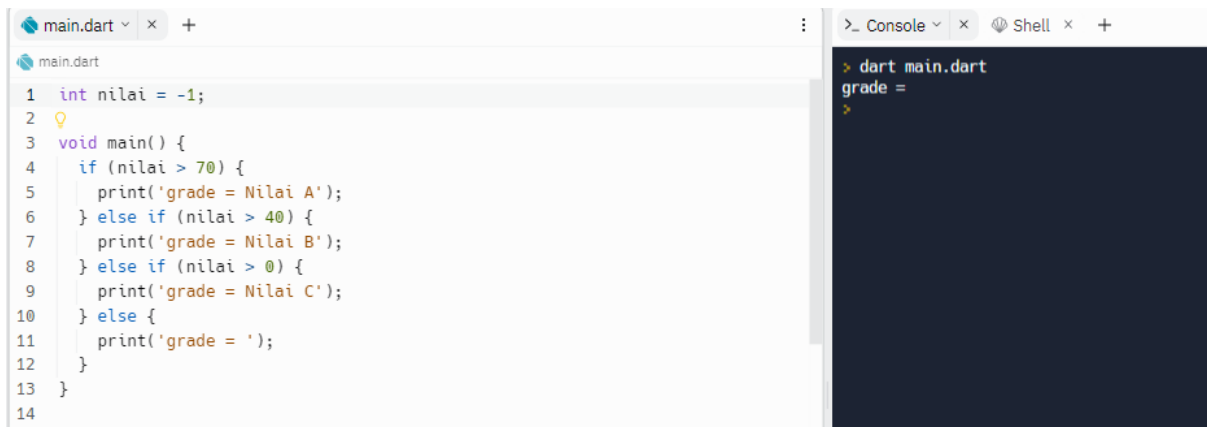
```
main.dart
1 int nilai = 41;
2
3 void main() {
4   if (nilai > 70) {
5     print('grade = Nilai A');
6   } else if (nilai > 40) {
7     print('grade = Nilai B');
8   } else if (nilai > 0) {
9     print('grade = Nilai C');
10  } else {
11    print('grade = ');
12  }
13 }
```

```
>_ Console
> dart main.dart
grade = Nilai B
```



```
main.dart
1 int nilai = 1;
2
3 void main() {
4   if (nilai > 70) {
5     print('grade = Nilai A');
6   } else if (nilai > 40) {
7     print('grade = Nilai B');
8   } else if (nilai > 0) {
9     print('grade = Nilai C');
10  } else {
11    print('grade = ');
12  }
13 }
```

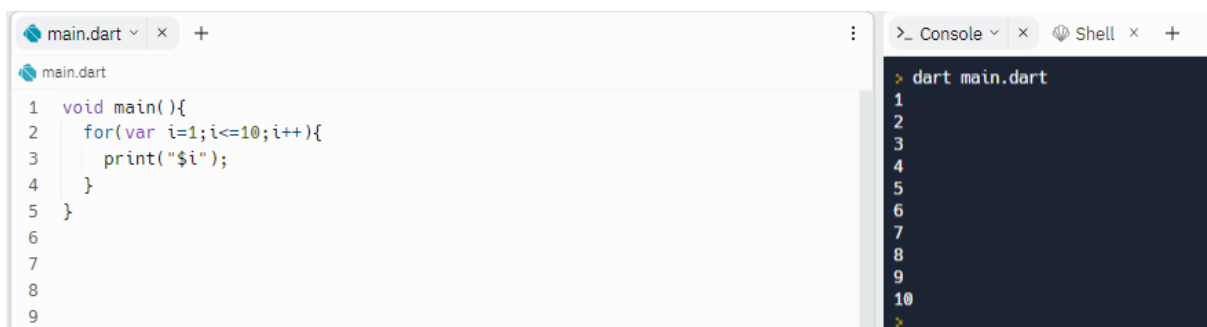
```
>_ Console
> dart main.dart
grade = Nilai C
```



```
main.dart x +
main.dart
1 int nilai = -1;
2
3 void main() {
4   if (nilai > 70) {
5     print('grade = Nilai A');
6   } else if (nilai > 40) {
7     print('grade = Nilai B');
8   } else if (nilai > 0) {
9     print('grade = Nilai C');
10  } else {
11    print('grade = ');
12  }
13 }
14
```

```
>_ Console x Shell x +
> dart main.dart
grade =
```

## Nomor 2



```
main.dart x +
main.dart
1 void main(){
2   for(var i=1;i<=10;i++){
3     print("$i");
4   }
5 }
6
7
8
9
```

```
>_ Console x Shell x +
> dart main.dart
1
2
3
4
5
6
7
8
9
10
>
```

Screenshoot soal prioritas 2

## Tugas Perulangan (Looping)

### Nomor 1



```
main.dart x +
main.dart
1 void main() {
2   // String s akan menyimpan piramida
3   String s = '';
4   // baris adalah tinggi piramida
5   int baris = 8;
6   // Looping dari 1 hingga baris
7   for (int a = 1; a <= baris; a++) {
8     // Cetak spasi sebanyak baris - a
9     for (int b = 1; b <= baris - a; b++) {
10      s += ' ';
11    }
12    // Cetak bintang sebanyak 2 * a - 1
13    for (int c = 1; c <= 2 * a - 1; c++) {
14      s += '*';
15    }
16    // Tambahkan newline
17    s += '\n';
18  }
19  // Cetak piramida
20  print(s);
21 }
??
```

```
>_ Console x Shell x +
> dart main.dart
*
***
*****
*****
*****
*****
*****
*****
>
```

## Nomor 2

```
main.dart x +
main.dart
1 import 'dart:io';
2
3 void main() {
4   int tinggi = 11; // tinggi jam pasir
5
6   if (tinggi % 2 == 0) {
7     print("Tinggi harus ganjil.");
8   } else {
9     cetakJamPasir(tinggi);
10  }
11 }
12
13 void cetakJamPasir(int tinggi) {
14   int spaceCount = 0;
15   int starCount = tinggi;
16
17   for (int i = 1; i <= tinggi; i++) {
18     for (int j = 1; j <= spaceCount; j++) {
19       stdout.write(' ');
20     }
21
22     for (int k = 1; k <= starCount; k++) {
23       stdout.write('0');
24     }
25
26     if (i <= tinggi ~/ 2) {
27       spaceCount++;
28       starCount -= 2;
29     } else {
30       spaceCount--;
31       starCount += 2;
32     }
33
34     print('');
35   }
36 }
```

```
> dart main.dart
0000000000
000000000
00000000
000000
000
0
000
00000
0000000
00000000
0000000000
>
```

## Tugas Function

### Nomor 1

```
main.dart
1 import 'dart:io';
2
3 void main() {
4   int r = 10; // jari-jari lingkaran
5   double luas = hitungLuasLingkaran(r);
6   print("Luas lingkaran dengan jari-jari $r adalah $luas");
7 }
8
9 double hitungLuasLingkaran(int r) {
10   const phi = 3.14;
11   double luas = phi * r * r;
12   return luas;
13 }
14
```

```
> dart main.dart
Luas lingkaran dengan jari-jari 10 adalah 314.0
>
```

### Nomor 2

The screenshot shows the DartPad web interface. The code editor on the left contains a Dart program that defines a recursive function `hitungFaktorial` and a `main` function. The `main` function calls `hitungFaktorial` with values 10, 40, and 50, and prints the results. The console on the right shows the output of these calculations.

```
15 num n1 = 10;
16 num n2 = 40;
17 num n3 = 50;
18 void main() {
19   print("Faktorial dari $n1 adalah ${hitungFaktorial(n1)}");
20   print("Faktorial dari $n2 adalah ${hitungFaktorial(n2)}");
21   print("Faktorial dari $n3 adalah ${hitungFaktorial(n3)}");
22 }
23
24 num hitungFaktorial(num n) {
25   if (n == 0) {
26     return 1;
27   } else {
28     return n * hitungFaktorial(n - 1);
29   }
30 }
```

Console output:

```
Faktorial dari 10 adalah 3628800
Faktorial dari 40 adalah 8.159152832478977e+47
Faktorial dari 50 adalah 3.0414093201713376e+64
```

Screenshoot soal eksplorasi

## Nomor 1

The screenshot shows an IDE with a Dart file named `main.dart`. The code defines a function `isPrima` to check if a number is prime and a `main` function that uses it. The console shows the output of the program.

```
1 import 'dart:io';
2
3 void main() {
4   int bil = 17; // masukan bilangan
5
6   if (isPrima(bil)) {
7     print("$bil adalah bilangan prima");
8   } else {
9     print("$bil bukan bilangan prima");
10  }
11 }
12 //Fungsi untuk mengecek bilangan prima atau bukan
13 bool isPrima(int bil) {
14   if (bil <= 1) {
15     return false;
16   }
17
18   for (int i = 2; i <= bil / 2; i++) {
19     if (bil % i == 0) {
20       return false;
21     }
22   }
23   return true;
24 }
```

Console output:

```
> dart main.dart
17 adalah bilangan prima
```

## Nomor 2

The screenshot shows an IDE with a Dart file named `main.dart`. The code defines a `main` function that generates a multiplication table of size `n` by `n`. The console shows the output of the program.

```
1 import 'dart:io';
2
3 void main() {
4   int n = 9; // input panjang tabel perkalian
5
6   for (int i = 1; i <= n; i++) {
7     for (int j = 1; j <= n; j++) {
8       int hasil = i * j;
9       stdout.write("$hasil\t");
10    }
11    print("");
12  }
13 }
```

Console output:

```
> dart main.dart
1 2 3 4 5 6 7 8 9
2 4 6 8 10 12 14 16 18
3 6 9 12 15 18 21 24 27
4 8 12 16 20 24 28 32 36
5 10 15 20 25 30 35 40 45
6 12 18 24 30 36 42 48 54
7 14 21 28 35 42 49 56 63
8 16 24 32 40 48 56 64 72
9 18 27 36 45 54 63 72 81
```