

- ① - False
 - True
 - True
 - True
 - False
 - True
 - True
 - True
 - True
 - True
 - True
 - True
 - True
 - True
 - True

- ② - nilai akhir variabel result adalah 25
 - output program adalah Nilai akhir result: 25
 - kondisi 1: $x > 5$ benar, selanjutnya cek apakah $y < 10$, dan hasilnya benar. Berarti $result = x + y$
 Kondisi 2 & $z > 10$ & $x == 10$ benar, berarti nilai current result ditambah z
 Kondisi 3 & $x == 10$ || $y > 10$ ya salah satu benar ($x == 10$) berarti nilai current result ditambah 5
 Kondisi 4 & $!(x < 15 \&\& y < 10)$ berarti pertama cek apakah $x < 15$ dan $y < 10$ lalu hasilnya dinegasikan. dampaknya adalah hasilnya menjadi false (in this case), berarti nilai current result dikurangi 10

```

③ "soal3"
import java.util.Scanner;

public class soal3 {
    public static void main(String[] args) {
        Scanner input = new Scanner(System.in);
        System.out.println("masukan tahun: (contoh: 2002)");
        int year = input.nextInt();
        System.out.println("masukan bulan: (tiga huruf, huruf pertama kapital)");
        String month = input.next();
        input.close();

        String[] listMonth = {"Jan", "Feb", "Mar", "Apr", "May", "Jun", "Jul", "Aug", "Sep",
                               "Oct", "Nov", "Des"};
        int[] totalDays = {31, 29, 31, 30, 31, 30, 31, 31, 30, 31, 30, 31};

        String result = "\nInvalid month. \nin here is the valid month: \n" +
            String.join(", ", listMonth);

        if (year % 4 == 0) {
            totalDays[1] = 29;
        }

        for (int i = 0; i < totalDays.length; i++) {
            if (month.equals(listMonth[i])) {
                result = month + " " + year + " memiliki " + totalDays[i] + " hari ";
            }
        }

        System.out.println(result);
    }
}
  
```

④ "soala

```
import java.util.Scanner;
```

```
public class soala {
```

```
    public static void main(String[] args) {
```

```
        Scanner input = new Scanner(System.in);
```

```
        System.out.println("masukan true/false: ");
```

```
        String userInput = input.next();
```

```
        input.close();
```

```
        String result = "User input is: ";
```

```
        switch (userInput) {
```

```
            case "true":
```

```
                result += true
```

```
                break;
```

```
            case "false":
```

```
                result += false.
```

```
                break;
```

```
            default:
```

```
                result += "Invalid (only true or false with lowercase)";
```

```
                break;
```

```
        }
```

```
        System.out.println(result);
```

```
    }
```

```
}
```

```
///
```