Automata Formal Languages and Logic
Syntax Validator Using Lex and Yacc

GOLANG

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1) VARIABLE DECLARATION

INPUT

```
data=''' var (
hello string = " hey "
sup int = 5

)
''';
```

OUTPUT

```
[Running] python -u "/Users/ashwin/Downloads/Go_Syntax.py"
Syntax is correct .

[Done] exited with code=0 in 0.084 seconds
```

2) SWITCH CASE

INPUT

```
data=''' switch time {
    case "morning":
        fmt.Println("Time to wake up!")
    case "night":
        fmt.Println("Time to go to bed.")
    default:
        fmt.Println("Enjoy life")
}
''';
```

OUTPUT

```
[Running] python -u "/Users/ashwin/Downloads/Go_Syntax.py"
Syntax is correct .

[Done] exited with code=0 in 0.066 seconds
```

3) FOR LOOP

INPUT

```
data=''' for i := 1 ; i <= n; i++ {
    sum += i    // sum = sum + i
    }

''';
```

OUTPUT

```
[Running] python -u "/Users/ashwin/Downloads/Go_Syntax.py"
Syntax is correct .

[Done] exited with code=0 in 0.066 seconds
```

4) EXPRESSION

INPUT

```
data=''' a + b *c + d - e*f + j
'''
```

OUTPUT

```
[Running] python -u "/Users/ashwin/Downloads/Go_Syntax.py"
Syntax is correct .

[Done] exited with code=0 in 0.068 seconds
```

5) IF-ELSE

INPUT

```
data=''' x := 100
          y := 200
    if x == 50 {
        fmt.Println("Germany")
    } else if x == 100 {
        fmt.Println("Japan")
    } else {
        fmt.Println("Canada")
    }
}
'''
```

OUTPUT

```
[Running] python -u "/Users/ashwin/Downloads/Go_Syntax.py"
Syntax is correct .

[Done] exited with code=0 in 0.071 seconds
```