

# Modul 6

## Python Decision Making

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### 1. IF-ELSE Statement

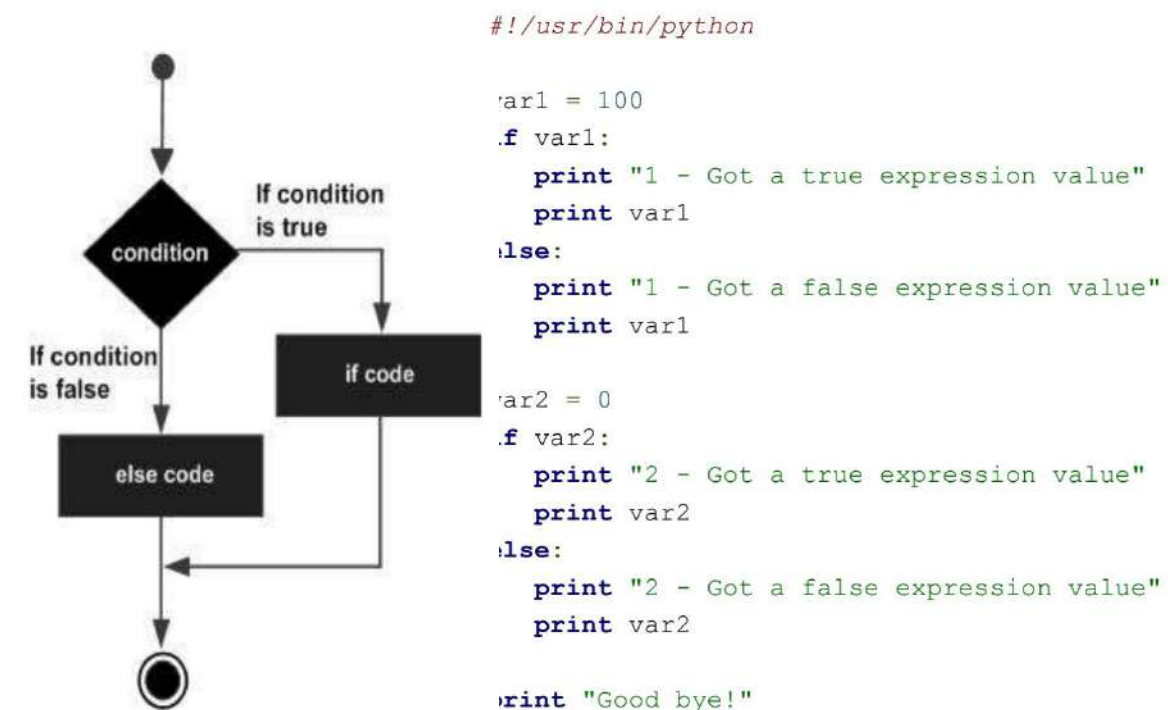
An else statement can be combined with an if statement. An else statement contains the block of code that executes if the conditional expression in the if statement resolves to 0 or a FALSE value. The else statement is an optional statement and there could be at most only one else statement following if.

### Syntax

The syntax of the *if...else* statement is –

```
if expression:  
    statement(s)  
  
else:  
    statement(s)
```

### Flow Diagram



## 2. The elif Statement

The **elif** statement allows you to check multiple expressions for TRUE and execute a block of code as soon as one of the conditions evaluates to TRUE. Similar to the **else**, the **elif** statement is optional. However, unlike **else**, for which there can be at most one statement, there can be an arbitrary number of **elif** statements following an **if**.

### **syntax**

```
if expression1:
    statement(s)

elif expression2:
    statement(s)

elif expression3: statement(s)

else:
    statement(s)
```

Core Python does not provide switch or case statements as in other languages, but we can use if..elif...statements to simulate switch case as follows

### **Example**

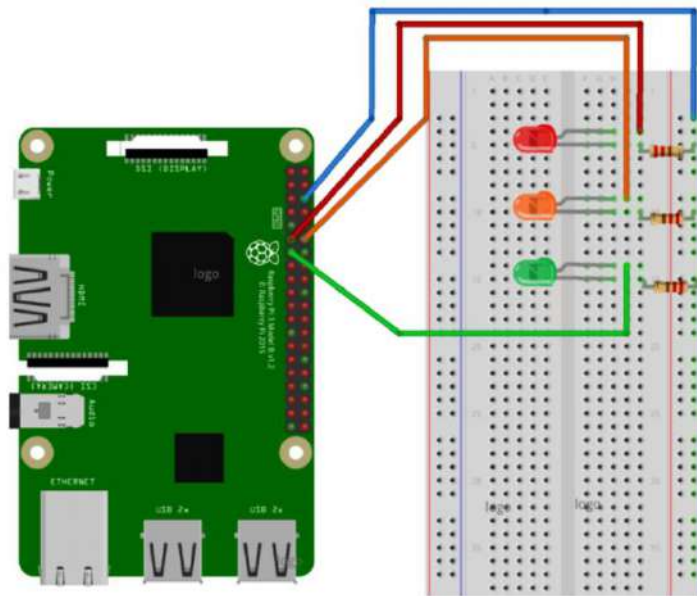
```
#!/usr/bin/python

var = 100
if var == 200:
    print "1 - Got a true expression value"
    print var
elif var == 150:
    print "2 - Got a true expression value"
    print var
elif var == 100:
    print "3 - Got a true expression value"
    print var
else:
    print "4 - Got a false expression value"
    print var

print "Good bye!"
```

## JOB SHEET 6

Lakukan perakitan komponen pada gambar di bawah ini (Traffic Light) dan gunakan berbagai variasi script program IF-ELSE pada Python.



LAPORAN HASIL PERCOBAAN: