

2. Shell Scripting – case conditions

Drawbacks of if-block:

- Complexity of script / program increases as the number of conditions or nested structure is added.
- Time of execution and file size increases as the number of conditions increases.
- The if-block is executed on the basis of priority which may sometimes result in neglecting the most appropriate condition.

A solution to the above problems can be the case conditions / case statements. In case statements different conditions will be given as different cases. All cases hold a possible value of the variable on which case conditions are made. The most appropriate condition will be chosen based on the current value of the variable.

Case conditions:

```
start of case conditions → case $var in
    possible value → value1)
                                #logic
    break a case → ;;
                    value2)
                                #logic
                    ;;
                    value3)
                                #logic
                    ;;
    default case → *)
                    #logic
                    ;;
end of case conditions → esac
```

The diagram illustrates the syntax of a case statement. It shows the sequence of keywords and values used in a case statement, with red arrows pointing from descriptive text to the corresponding code elements. The code elements are color-coded: blue for keywords and values, green for comments, and red for descriptive text. The sequence is: `case $var in` (start of case conditions), `value1)` (possible value), `#logic` (comment), `;;` (break a case), `value2)` (value), `#logic` (comment), `;;` (break a case), `value3)` (value), `#logic` (comment), `;;` (break a case), `*)` (default case), `#logic` (comment), `;;` (break a case), and `esac` (end of case conditions).

- If the value of the variable matches with any of the values, the instructions under that particular case till breakpoint (;;) will be executed.
- If the value of variable doesn't match with any of the case then default case(*) will be executed. Case conditions are meant for one time execution.