

C Language

Chapter # 11

Decision Constructs

Lecture: 30

Today's Lecture

- Nested “if” Statement

Nested “if” Statement

- ▶ An if statement within an if statement is called nested if statement.
- ▶ In nested structure, the control enters into inner if only when the outer condition is true.
- ▶ The user can use as many if statements inside another if statement as required. The increase in the level of nesting increases the complexity of nested if statement.

Working of Nested “if”

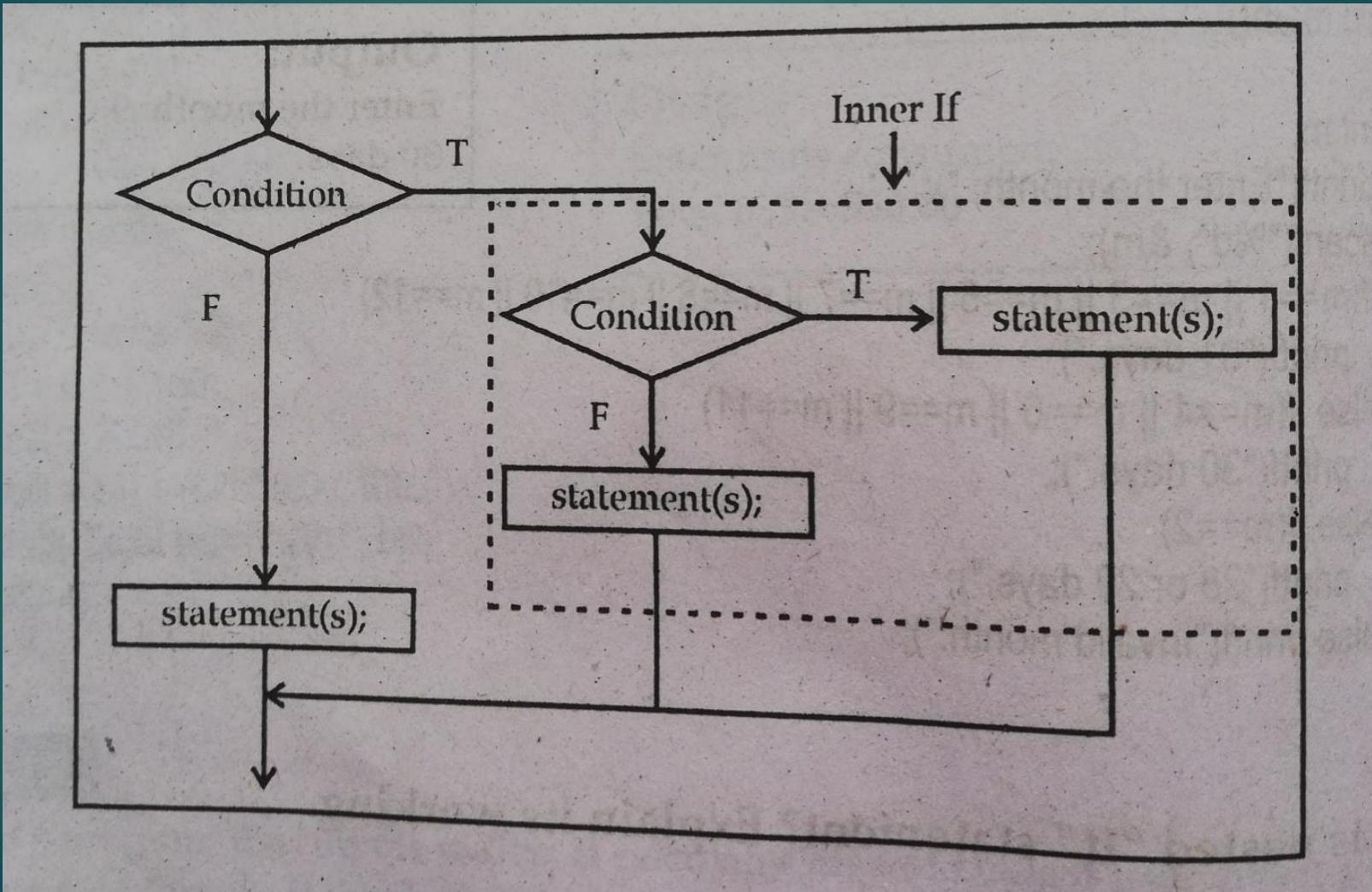
- ▶ In nested if statement, the condition of outer if is evaluated first. If it is true, the control enters in the inner if block. The inner if evaluated according to simple if statement.
- ▶ if the condition is false, the inner if is skipped and control directly moves to the else part of outer if.

Nested “if” statement

Syntax:

```
if(condition)
{
    if(condition)
    {
        Statements;
    }
    else
    {
        Statements;
    }
}
else
{
    Statements;
}
```

Flowchart (Nested “if” statement)



Compare Nested “if” with sequence of “if” statements

- ▶ The “Sequence of if” statements is simpler than “Nested if” statement.
- ▶ The beginners usually prefer to use a “Sequence of if” statements than “Nested if” statement.
- ▶ However, it is sometimes useful to use “Nested if” instead of “Sequence of if” statements.
- ▶ In “Nested if” statement, the remaining conditions are skipped when the control reaches a logical decision. In the “Sequence of if” statements all conditions are tested in any case.



The End

Read this topic from your books and ask question if any confusion.

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