Exercise Book

Statement and Decision Coverage for the ISTQB Certified Tester Foundation Level exam

600 exercises on the ISTQB white-box test design techniques

by **ISTQB®** International Software Testing Qualifications Board

Statement and Decision Coverage for the ISTQB Certified Tester Foundation Level Exam. Exercise Book.

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http://leanpub.com/statement-decision-testing-coverage-istqb-foundation-exam-exercise-book

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Introduction

This Exercise Book provides you with 600 exercises on white-box testing techniques which you may come across during your ISTQB Foundation Level exam. Questions refer to code coverage which is an analysis method that determines which parts of software have been executed (covered) by the test suite and which parts have not been executed. In this book statement coverage and decision coverage have been covered. Since for many functional testers testing pseudocode is not obvious enough, this book will help you understand how to answer questions related to code and pseudocode.

Chapter 1. Code and pseudocode

There are a number of ways in which code can be provided in exam question. It may be a piece of a real code.

PHP code example:

```php
if ($t<"20")
  {
  echo "Have a good day!";
  }
else
  {
  echo "Have a good night!";
  }
```

which is translated in pseudocode as

```
IF ()
{
            ;
}
ELSE
{
        ;
}
```

JAVA code example.

```java
if(var%2 == 0)
      System.out.println("Have a good day");
else
      System.out.println("Have a good night")
```

which is translated in pseudocode as

```
    IF ()
    {
            ;
    }
    ELSE
    {
          ;
    }
```

C++ code example. {lang="c++"}

```c++
if ( a <= 10 )
      {
                    cout << "Below 10" << '\n';
      }
      else
                {
                      if ( a < 60 )
                      {
                              cout << "Below 60" << '\n';
                      }
```

which is translated in pseudocode as

```
    IF ()
    {
            ;
    }
    ELSE
    {
          IF
          {
                ;
          }
    }
```

Despite the way code is provided, it should always be read and understood in the same way. It is a common practice that during an exam code is presented as pseudocode.
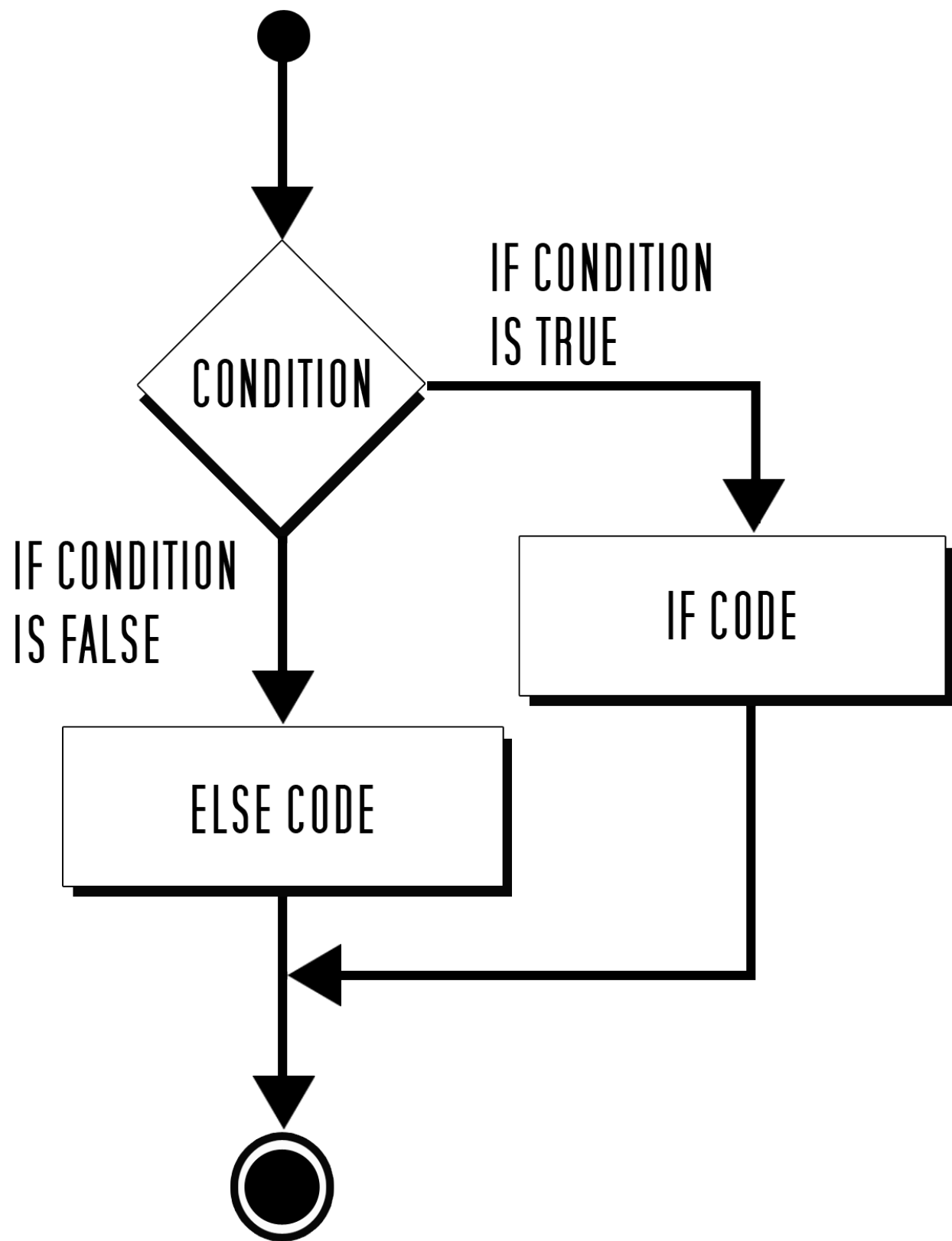Pseudcode may be a simple text.

```
    If
            card number is valid then perform transaction
    In other case
            print information about failure
    End
```

which is translated as

```
    IF ()
    {
                ;
    }
    ELSE
    {
            ;
    }
```

There is also a possibility that pseudocode will be presented in the form of a graph.

Code as a graph

which is translated in pseudocode as

```
IF ()
{
            ;
}
ELSE
{
        ;
}
```

Pseudocode can also be provided in a like-a-code way. Though it is not a real code, it looks like one.

```
IF
        THEN
ENDIF
IF
        THEN
ELSE
ENDIF
```

which is translated in pseudocode (used in this book) as

```
IF ()
{
        ;
}
IF
{
            ;
}
ELSE
{
        ;
}
```

For a purpose of this book we will use one notation of pseudocode. However, during an exam one may also come across a notation written in a standard code.