Chapter 1 : Flowchart else if - Stack Overflow

The _____ symbol is used to represent a selection structure in flowcharting. diamond The _____ symbol indicates that some condition must be tested in a flowchart.

The steps are executed in the same order in which they are written. Below is an example set of instructions to add two numbers and display the answer. A selection statement can be used to choose a specific path dependent on a condition. There are two types of selection: Binary Selection In binary selection, if the condition is met then one path is taken, otherwise the second possible path is followed. In each of the examples below, the first case described requires a process to be completed only if the condition is true. The process is ignored if the condition is false. In the second case, there is an alternative process if the condition is false. Multi-way selection Multi-way selection allows for any number of possible choices, or cases. The path taken is determined by the evaluation of the expression. Multi-way selection is often referred to as a case structure. An occurrence of repetition is usually known as a loop. An essential feature of repetition is that each loop has a termination condition to stop the repetition, or the obvious outcome is that the loop never completes execution. This is known as an infinite loop and is obviously undesirable. The termination condition can be checked or tested at the beginning or end of the loop, and is known as a pre-test or post-test, respectively. Following is a description of each of these types of loop. Repetition pre-test loop A pre-tested loop is so named because the condition has to be met at the very beginning of the loop or the body of the loop is not executed. This construct is often called a guarded loop. The body of the loop is executed repeatedly while the termination condition is true. Repetition post-test loop A post-tested loop executes the body of the loop before testing the termination condition. This construct is often referred to as an unguarded loop. The body of the loop is repeatedly executed until the termination condition is true. An important difference between a pre-test and post-test loop is that the statements of a post-test loop are executed at least once, even if the condition is originally true, whereas the body of the pre-test loop may never be executed if the termination condition is originally true. A close look at the representations of the two loop types makes this point apparent. They use refinement develop solutions to problems that are easy to follow. Sections of the solution are developed and presented in understandable chunks, and because of this, subprograms are particularly useful when using the top-down method of solution development. When using subprograms it is important that the solution expression indicates where the main program branches to a subprogram. It is equally important to indicate exactly where the subprogram begins. In pseudocode, the statement in the main program that is expanded in a subprogram is underlined in the example below the word "read" should be underlined, but this system does not allow underlining to indicate that further explanation follows. The expanded subprogram section should be identified by using the keyword BEGIN followed by the underlined title used in the main program. The end of the subprogram is marked by the keyword END and the underlined title used in the main program. When using flowcharts, a subprogram is shown by an additional vertical line on each side of the process box. This indicates that the subprogram is expanded elsewhere. The start and end of the subprogram flowchart uses the name of the subprogram in the termination boxes. In many cases a subprogram can be written to do the same task at two or more points in an algorithm. Each time the subprogram is called, it may operate on different data. To indicate the data to be processed, one or more parameters are used. The parameters allow the author to write a general algorithm using the formal parameters. When the subprogram is executed, the algorithm carries out its task on the actual parameters given at the call. The parameters to be used by a subprogram are provided as a list in parentheses after the name of the subprogram. There is no need to include them at the end of the algorithm.

Chapter 2 : Pseudocode for Nested If Selection Structure

a selection structure that is wholly contained (nested) within another selection structure switch statement a C++ statement that can be used to code a multiple-alternative selection structure.

By Muhammad Asif - February 26, When multiple conditions have to check in the program then "nested if statements" are used to solve the problem. The nested if structure may contain multiple if statements that may be nested up to any level. The control enters into the "inner if structure" only when condition of the "outer if statement" is true. Its represents outer "if statement" condition or set of conditions. Block-1 It represents a statement or set of statements of inner "if statement". Block-2 It represents a statement or set of statements of outer "if statement". Block-3 It represents a statement or set of statements of "else" part of its outer "if statement". Execution The following is the logic of the execution of nested if statement: If the condition of the "outer if statement" is true, then "inner if statement" is executed. If condition of the inner if statement is true, then Block-1 is executed. If condition of the inner if statement is false, then Block-2 is executed. If condition of the "outer if statement" is false, then Block-3 is executed. Nested if Statement Example Programs Example 1: The following source code of the program inputs three numbers and finds out the smallest value using "nested if statement". The following source code of the program inputs four integer values from the user and finds out if these values or equal or different using "nested if statement". The grade is calculated as: If average is greater than 80, grade is A. If average is less than 80 and greater than 60, grade is B. If average is less than 60 and greater than 33, grade is C. If average is less than 33, grade is F. Suppose entered marks are 78, 65, 57 respectively Enter Marks of Mathematics:

Chapter 3 : calendrierdelascience.com & Nested Selection Structure

Here we have if else selection structure within the if statement that tests whether the variable num is an even or odd number. Notice that the nested if will only be checked if the condition of the if statement is true.

Chapter 4 : Programming Pseudocode Nested if into Control Structure - Stack Overflow

The structure above is called the case structure or selection structure. The decision works fine if you have only two outputs, but if there are several, then using multiple decisions makes the chart too busy.

Chapter 5 : CIS LAB ASSIGNMENT #4

Pseudocode for Nested If Selection Structure. Get Student Name. Get Grade Point Average from User. Get Hours Completed from User. If Grade Point Average is greater than then.

Chapter 6 : Introduction to Programming with C++ | Open Library

Nested Selection structures A nest selection structure is one in which either the true path or the false path includes yet another selection structure.

Chapter 7 : Selection Structures in C++

Lesson A Objectives After studying Lesson A, you should be able to: â€¢ Include a nested selection structure in pseudocode and in a flowchart â€¢ Code a nested selection structure â€¢ Desk-check an algorithm â€¢ Recognize common logic errors in selection structures â€¢ Include a multiple-alternative selection structure in pseudocode and in a flowchart â€¢ Code a multiple-alternative selection.

Chapter 8 : beginning C programming: Tutorial Nested if Selection Structure

• Include a nested selection structure in pseudocode and in a flowchart • Code a nested selection structure • Recognize common logic errors in selection structures • Include a multiple-alternative selection structure in pseudocode and in a flowchart • Code a multiple-alternative selection structure in C++ Objectives An Introduction to.

Chapter 9 : C++ Nested If Statement with examples - CodeHim

Can anyone help me change this nested if into a control case, or something more efficient (just not loops)? Design a solution for the following problem, use modules where possible. Illustrate your solution with structured flowcharts and corresponding pseudocode.