

Computer Programming 143 – Lecture 7

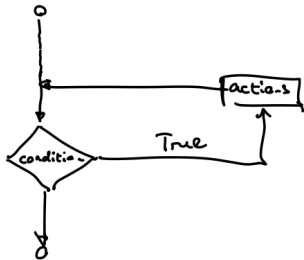
Program Control II

Faculty of Engineering



The do...while statement

while:

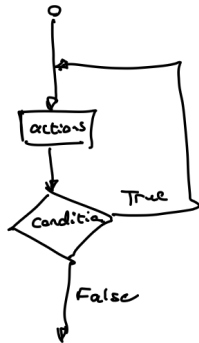


do
{

// happens once

// then repeats if condition True

} while (condition);



Logic

Want to check $65 < x < 75$?

```
if ( x > 65 )
{
    if ( x < 75 )
    {
        printf ("B!");
    }
}
```

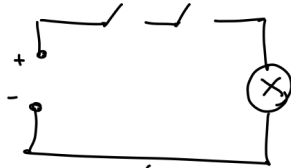
Logical operators :

- And &&
- Or ||
- Not !

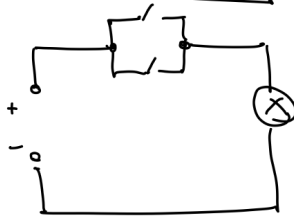
Logical statements evaluate to:

0 $\rightarrow$ False

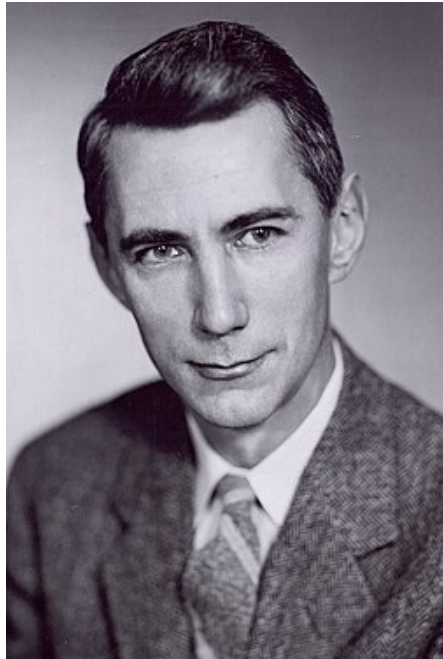
1 $\rightarrow$ True



And



Or



4.7 & 4.9 Example: do...while and logical operators

|

Problem statement

As part of a survey, read the user's level of happiness on a scale of 1 to 10 and inform the user whether he/she has a normal (3 to 8) or abnormal (1, 2, 9 or 10) level of happiness. Ensure that the user enters a valid level.

Pseudocode

Do

Read user's level of happiness

Until the user has input a valid level

If the user has a normal level of happiness

Inform the user that his/her happiness level is normal

Else

Inform the user that his/her happiness level is abnormal

My first conference

An Investigation of Depressed Speech Detection: Features and Normalization

Nicholas Cummins¹, Julien Epps^{1,2}, Michael Breakspear^{3,4}, and Roland Goecke⁵

¹ School of Elec. Eng. and Telecomm., The University of New South Wales, Sydney, Australia

² ATP Research Laboratory, National ICT Australia (NICTA), Australia

³ Black Dog Institute and School of Psychiatry, The University of New South Wales, Australia

⁴ Division of Mental Health Research, Queensland Institute of Medical Research, Australia

⁵ Faculty of Information Sciences and Engineering, University of Canberra, Australia

nicholas.cummins@student.unsw.edu.au, j.epps@unsw.edu.au

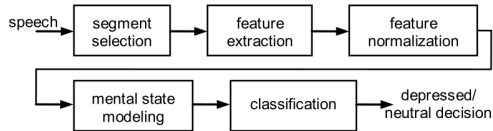


Figure 1: *Depression detection system configuration*

Decisions inside loops inside loops

```
#include <stdio.h>
int main()
{
    int i, j;
    for ( i = 1; i <= 7; i++ )
    {
        for ( j = 1; j <= 7; j++ )
        {
            if ( !( i == 4 || j == 4 ) )
            {
                printf( "*" );
            }
            else
            {
                printf( " ");
            }
        }
        printf( "\n" );
    }
}
```

i 1

j 1 2 3 4

* - * - * - -

A & B (B & B C)

Homework

- 1 Study Sections 4.7, 4.9, 4.10 in Deitel & Deitel
- 2 Do Self Review Exercises 4.2(c)&(d) in Deitel & Deitel
- 3 Do Exercises 4.29, 4.31 in Deitel & Deitel