

BCA 115: LAB I (C Programming)

Assignment 3

Assignment 3: Decision making statement (switch case)

You should read following topics before starting this exercise

1. Different types of decision-making statements available in C.
2. Syntax for switch case statements.

The control statement that allows us to make a decision from the number of choices is called a switch-case statement. It is a multi-way decision making statement.

1. Usage of switch statement

Statement Syntax	Flowchart	Example
<pre>switch(expression) { case value1: block1; break; case value2: block2; break; . . default: default block; break; }</pre>		<pre>switch (color) { case 'r' : printf ("RED"); break; case 'g' : printf ("GREEN"); break; case 'b' : printf ("BLUE"); break; default: printf ("INVALID COLOR"); }</pre>

Set A: Apply all the three program development steps for the following examples.

1. Accept a single digit from the user and display it in words. For example, if digit entered is 9, display Nine.
2. Write a program, which accepts two integers and an operator as a character (+, -, *, /), performs the corresponding operation and displays the result.
3. Accept two numbers in variables x and y from the user and perform the following operations

Options	Actions
1. Equality	Check if x is equal to y
2. Less Than	Check if x is less than y
3. Quotient and Remainder	Divide x by y and display the quotient and remainder
4. Range	Accept a number and check if it lies between x and y (both inclusive)
5. Swap	Interchange x and y

Signature of instructor

Date

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Set B: Apply all the three program development steps for the following examples.

- Write a C program to create a simple calculator (accepts two integers and an operator as character (+ - * /), and performs addition, subtraction, multiplication and division depending the input from user)
- Write a C program which gives choices to the user as following. Accept a choice from user and according to entered choice do operation.
 - Find size of char, int, float, double.
 - Check alphabet or not.
 - Check number is divisible by 3 or 4.
 - Solve expression, ans= 9*a+3.9/b-1%2
 - Exit

Signature of instructor

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Assignment Evaluation

0: Not done ☐

2: Late Complete ☐

4: Complete ☐

1: Incomplete ☐

3: Needs improvement ☐

5: Well Done ☐

Signature