

CSCI 1301 – Lab 10

1 Mid-term Survey

If you haven't already, please take the time to complete the “Mid-term Survey” on [desire 2 learn](https://lms.augusta.edu/)¹.

2 Practicing `if` and `switch`

This exercise will ask you to write *abstract* program to perform simple manipulation. Initialize a `day` string variable, a `myVar` int variable, an `initial` char variable, and a flag. Set and change the value of those variables to make good tests as you progress through this problem. You can also display them on the screen to help you in making sure that your statements behave as they are supposed to.

2.1 From `switch` to `if-else`

1. Write a `switch` statement that sets the flag to `true` if the value of `day` is "Mon.", "Tue.", "Wed.", "Thu." or "Fri.", and to `false` otherwise.
2. Rewrite the previous statement as an `if-else` statement.

2.2 From `if-else` to `switch`

1. Write a `if-else` statement that doubles the value of `myVar` if `myVar` is 3, 5 or 7.
2. Can you rewrite the previous statement as a `switch` statement?

2.3 Deciding

1. Write a statement that doubles the value of `myVar` and sets `initial` to 'M' if `day` is equal to "Sat". What is the appropriate kind of statement to do this?
2. Write a statement that displays “Hello” on the screen if the value of `initial` is 'E' or 'e', “Bonjour” if the value of `initial` is 'F' or 'f', “Guten Tag” if the value of `initial` is 'D' or 'd'. What is the appropriate kind of statement to do this?

2.4 Complex Conditions

1. Write a statement that doubles the value of `myVar` if `day` is "Sun.", triples the value of `myVar` if `day` is not "Sun." and `initial` is 'a', and sets `myVar` to 0 otherwise.
2. Write a statement that sets `myVar` to 0 if `initial` is an upper-case letter, and to 1 otherwise. You will need to understand how to use the `IsUpper` method ([https://msdn.microsoft.com/en-us/library/9s91f3by\(v=vs.110\).aspx](https://msdn.microsoft.com/en-us/library/9s91f3by(v=vs.110).aspx)).

¹<https://lms.augusta.edu/>

3 Conditional Operator (optionnal)

There is an operator for `if else` statements for particular cases (assignment, call, increment, decrement, and new object expressions). You can read about it at <https://docs.microsoft.com/en-us/dotnet/csharp/language-reference/operators/conditional-operator>, its structure is:

```
condition ? first_expression : second_expression;
```

An example could be:

```
1 bool adult;  
2 // Assume that adult is set to true or false.  
3 int price = adult ? 5 : 3;
```

If `adult` is true, then `price` will get the value 5, otherwise, `price` will get the value 3.