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# **Switch**



Published Mar 15, 2023 · Updated Oct 12, 2023

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**Switch** statements execute a code block from a list of case conditions for which the expression validates as true. Switch statements are similar to if/else statements.

# **Syntax**

```
switch (expression)
{
   case alpha:
    // Code block
   break;
   case beta:
    // Code block
   break;
   default:
    // Code block
   break;
}
```

A switch statement includes one or more case conditions. The case conditions are evaluated in top-to-bottom order. If none of the case conditions evaluate to true, the default condition is executed. If no default is defined, the switch statement is bypassed.

### Common Switch syntax definitions:

- switch: Definition of the switch statement.
- expression: The logic each case will be evaluated against.
- case: A value the expression is matched against. If the case matches the result of the expression, the code block within the case will be executed.
- break (recommended): Terminates the switch statement. Recommended at the end of each case and default to terminate the switch once the case has been fulfilled. A switch statement tests all cases unless a break, throw, or return statement is used to direct control out of the switch. If no break statement exists in a case, C# will throw a compile time error.
- default (optional): The behavior executed if no case condition matches the expression.

## **Codebyte Example**

The following example creates a string variable named <code>favoriteTurtle</code> with the value of <code>"Donatello"</code>. A switch statement is defined that evaluates the value of <code>favoriteTurtle</code>. If a case matches the value of <code>favoriteTurtle</code>, a corresponding message is printed to the console. If none of the cases in the switch statement match the value of <code>favoriteTurtle</code>, a default message is printed to the console.

```
С
     Code
                                                                           Output >
 1
      using System;
 2
 3
      public class Example
 4
 5
        public static void Main(string[]
 6
 7
        string favoriteTurtle = "Donatelle"
 8
 9
        switch (favoriteTurtle)
10
          case "Leonardo":
11
12
            Console.WriteLine("Leads!");
            break:
                                                                                   Run
```

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