# Exercises about data types

* Solve them in Visual Studio or use <https://dotnetfiddle.net/>.

## Exercise 03.01

* Loop from 1 till 100.
* If the number can be divided by 3, show it on a new line in the console like this: “x divided by 3 is y”.
* Show message “Hit any key to stop”.

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|  | Use the operator % (modulo). |
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### Example

3 divided by 3 is 1

6 divided by 3 is 2

9 divided by 3 is 3

…

96 divided by 3 is 32

99 divided by 3 is 33

Hit any key to stop

## Exercise 03.02

* Define a variable that contains the current date and time.

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|  | Use DateTime.Now (Date with time).  Use DateTime.Today (only date). |
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* Show this as a text in the console.
* Now get from that string only the year and show that to the console.

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|  | Use substring to get a specific part of the string.  I want you to start this exercise by using “Substring”. Later, try to find other solutions.  This is an exercise on aText.Substring(blablabla). |
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* Show message “Hit any key to stop”.
* Can you find other ways to have exactly the same result?

### Example

06/05/2021 15:45:32

2021

Hit any key to stop

## Exercise 03.03

* Create 2 datetime variables.
* One with the current day.
* One with your birthdate.

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|  | Use Convert.ToDateTime.  Start with hardcoding your birthday (Year – Month – Day). |
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* Calculate the number of days you are alive.

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|  | If you know the hours and minutes. Give it a try. |
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|  | Extra exercise.  Try to ask the birthday with the console. (Year – Month – Day)  Try to calculate the correct age in years (difficult to be 100% correct in all situations). |
|  |  |

## Exercise 03.04

* Ask for an age in the console with a nice message.
* When the age is younger than 18, show the message: “Sorry, you are too young to enter this bar”.
* When the age is not younger than 18, show the message “Welcome”.

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|  | Add a routine (check) to see if the age is a number.  Repeat the question as long you don’t type a number. |
|  |  |

### Example 1

What is your age?

17

Sorry, you are too young to enter this bar

### Example 2

What is your age?

19

Welcome