

Programming with B4X

Lesson 3 – My first program

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Anywhere Software

Lesson 3 - My first Program

 **2h**

What students should know

- How to start B4J
- How to create and save a new project
- How to run a project
- What is error screen.
- How to see Turtle commands
- How to write a new project using Turtle

Hello World



Make a program that draws a straight line with the help of the turtle on the computer screen.

Recommended instructions for the instructor

The aim of the above exercise is to familiarize students in the creation of a project with B4J and to become the first acquaintance with the programming environment. The following instructions in no way limit the instructor to adapting his course to the relevant educational conditions.



Teachers tip

This is students first lesson. Therefore, keep it simple!

Function	Description
1 How to create a first project with B4J	<i>Menu File -> New -> B4Xturtle</i> <i>Project Folder</i> <i>Project Name</i> Explain to students the importance of the right names in each project they create and the value of correct storage in folders in a structured way
2 Run Project	<i>Menu Project -> Compile & Run</i> Explain what means compile and how to recognize syntax errors in log. You don't need to provide to much information about compilation. Just the basic stuff in order to run a project.
3 #Region Project Attributes	Change Values in <i>MainFormWidth</i> and <i>MainFormHeight</i> to make different size application
4 Sub Turtle_Start	<i>What means Sub?</i> A small amount of code which is doing a certain activity.

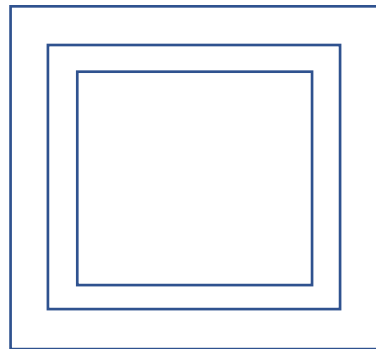


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Function	Description
5 Turtle methods	What is Turtle? What .MoveForward do? How can we find more commands? (Tell students to write "Turtle." To see the list of methods.
6 Errors	How to identify an error in log screen

Exercises

1. Using turtle and methods **MoveForward**, **TurnLeft**, **TurnRight** draw a square with any size you want.
2. Using Previous commands and **PenUp**, **PenDown** and **Move** draw 3 squares like the image bellow.



3. Using previous commands design a sketch of your choice. Give a name to your sketch and explain how you did it.