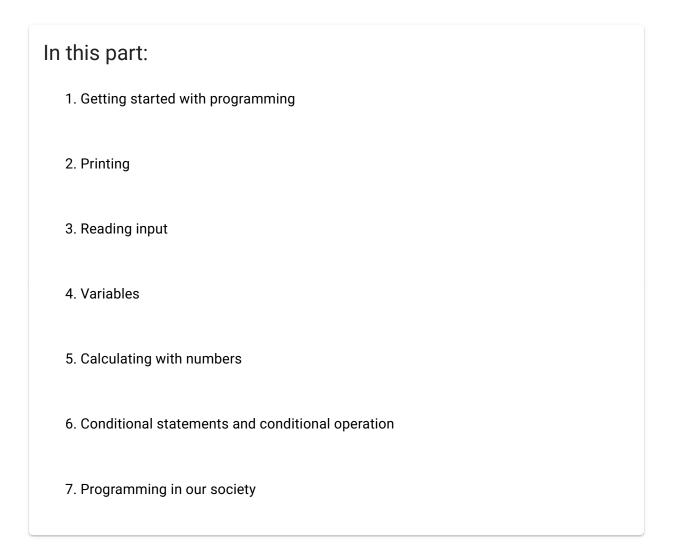


# Part 1

Welcome to learning programming! The first part of the course focuses on taking the plunge with programming and getting familiar with all the required tools.



The table of contents above lists the topics of the first part of the course. The first part has been designed to cover the first week of the course. You should reserve well above 10 hours for each part of the course, depending on previous experience with computers. If you've tried programming before, you might advance faster in the beginning

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#### Have fun!

List of exercises in this part

# 1. Getting started with programming

- 1. Quiz: Initial course questionnaire
- 2. Programming exercise: Sandbox
- 3. Quiz: What does the program print?

#### 2. Printing

- 1. Programming exercise: Ada Lovelace
- 2. Programming exercise: Once Upon a Time
- 3. Programming exercise: Dinosaur

## 3. Reading input

- 1. Programming exercise: Message
- 2. Programming exercise: Hi Ada Lovelace!
- 3. Programming exercise: Message Three Times
- 4. Programming exercise: Greeting
- 5. Programming exercise: Conversation
- 6. Programming exercise: Story

#### 4. Variables

- 1. Quiz: Media and technology use questionnaire
- 2. Programming exercise: Various Variables
- 3. Programming exercise: Integer Input
- 4. Programming exercise: Double Input
- 5. Programming exercise: Boolean Input
- 6. Programming exercise: Different Types of Input

# 5. Calculating with numbers

- 1. Programming exercise: Seconds in a day
- 2. Quiz: What does the program print?
- 3. Quiz: Expressions and variable value
- 4. Programming exercise: Sum of two numbers
- 5. Programming exercise: Sum of three numbers
- 6. Programming exercise: Addition formula
- 7. Programming exercise: Multiplication formula

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- 8. Programming exercise: Average of two numbers
- 9. Programming exercise: Average of three numbers
- 10. Quiz: Division
- 11. Programming exercise: Simple calculator
- 12. Quiz: Copying variable value

#### 6. Conditional statements and conditional operation

- 1. Programming exercise: Speeding Ticket
- 2. Programming exercise: Check Your Indentation
- 3. Programming exercise: Orwell
- 4. Programming exercise: Ancient
- 5. Programming exercise: Positivity
- 6. Programming exercise: Adulthood
- 7. Programming exercise: Larger Than or Equal To
- 8. Programming exercise: Grades and Points
- 9. Programming exercise: Odd or even
- 10. Programming exercise: Password
- 11. Programming exercise: Same
- 12. Programming exercise: Checking the age
- 13. Programming exercise: Leap year
- 14. Programming exercise: Gift tax

## 7. Programming in our society

1. Quiz: Part 1 learning outcomes



Source code of the material

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