Intro

1. Literature

Note: All of these books have been published in many editions. You can use (almost) all.

JAVA Language:

• Fain, Yakov: The Java Tutorial for the Real World. Smart Data Processing, Inc., 1. 8. 2002. ISBN 0-9718439-0-2.

OOP:

 RAJKUMAR, Buyya: Object-oriented Programming with Java: Essentials and Applications. Tata McGraw-Hill Education, 2009, ISBN: 978-0-07-066908-6

ALGORITHMS:

- CORMEN, T. H., LEISSERSON, Ch. T., RIVEST, R. L., STEIN, C.:
 Introduction to Algorithms. MIT Printing, 2000, ISBN:
 007013151. [Poznámka: jedná se o standardní učebnici na amerických vysokých školách. Vyšla v mnoha vydáních.]
- Dasgupta, S., Papadimitriou C. H., Vazirani U. V.: Algorithms.
 July 18, 2006 [Dostupná na internetu]

- TÖPFER, Pavel: Algoritmy a programovací techniky. Prometheus, 1995, ISBN: 8085849836.
- RYCHLÍK, Jan: Programovací techniky. Nakladatelství KOPP, 1992, ISBN: 8090105173.
- DVORSKÝ, J.: Algoritmy I. Skriptum VŠB, 2007
 [http://www.cs.vsb.cz/dvorsky/]

INTERNET:

- http://programujte.com/clanek/2007040702-java-tutorialtechnologie-1-dil/
- http://www.algoritmy.net/

 http://www.devbook.cz/java-tutorial-uvod-do-objektoveorientovaneho-programovani

ALGORITHMS:

- CORMEN, T. H., LEISSERSON, Ch. T., RIVEST, R. L., STEIN, C.:
 Introduction to Algorithms. MIT Printing, 2000, ISBN:
 007013151. [Note: it is a standard textbook for US universities . Exists in number of editions.]
- Dasgupta, S., Papadimitriou C. H., Vazirani U. V.: Algorithms.
 July 18, 2006 [Available on internet]

LECTURES:

Lectures and additional readings are available at FTP server:

ftp://147.32.163.62/Student

user=student

password=Password_1234

2. Assessments and Exams

1.1. Level #1 - Assessments

Assessment is awarded on the basis of the test. Test can pass directly before the test.

The test has an electronic form, through the web application Moodle (see later).

During the test is not allowed to use any aids, and especially internet. If someone is caught using the Internet during the test, it will be without mercy considered fraud.

To pass the test it is needed to reach 70% of the points. This limit is not intended strictly because it also depends on the severity of the errors.

For example, errors in spelling, diacritical, synonyms - that are generally few significant errors. In contrast, the ignorance of those parts to which I pointed out in lectures are very crucial./EN>

1.2. Exams

Credit is the condition for the exam.

The exam consists of written and oral parts.

As written part of the exam the student will write, debug and explain a simple program.

1)Examples of typical tasks:

- 1)From a disk file load all the text. Text split into separate words, while omit all words of less than 5 characters. The remaining words sort alphabetically and write to a new file so that each line has one word.
- 2)Select all primes from a disk file and calculate the median from those primes.
- 3)Program a simple application with a picture of a car, which after pressing the button will move on the screen.

After the practical part of the exam follows an oral part. During the oral part of exam the student in the example describes and explains some of phenomena or algorithms.

3. Moodle

Tests run in a web application Moodle.

1.3. Moodle Login

To login for Moodle use:

```
URL = https://vyuka.kokes-josef.cz/moodle/
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Alternative URL's (you will be redirected automatically): https://moodle.kokes-josef.cz/moodle/ https://tutorial.kokes-josef.cz/moodle/ Sometimes a <u>warning</u> appears. You can ignore a warning and continue to tests.

Use a link for login.

You will need a Sign-in Key. It is Password_1234

When logging for the first time, you must sign up pressing the button on the right hand side. Next time, you will log in normally.

On the following form, you write your new username. Například: Password_1234.

Your password must be cryptographically strong: it must be at least 6 chars long, must contain one capital letter, one cipher and one symbol. E.g. Password_1234.

You must also fill your <u>basic data</u> and in a short time you will obtain an email. Click on confirmation link. Now, you can login normally.

On the site you choose the appropriate <u>course</u>. You can choose only from the courses that are highlighted in blue. Gradually click down to the course <u>content</u>. (Shown here is just one example of the test.)

Test starts by pushing the **button**.

Questions alternate randomly. There are different types of questions. Here is shown the <u>choice</u> - of the many options the student must choose only one (the right one, of course).

There is a <u>combo</u> box on the next example.

After all questions are answered, student has option to return and correct possible errors (blue arrow here) or to upload his answers (red arrow here).

In conclusion appear correct answers and errors are marked.