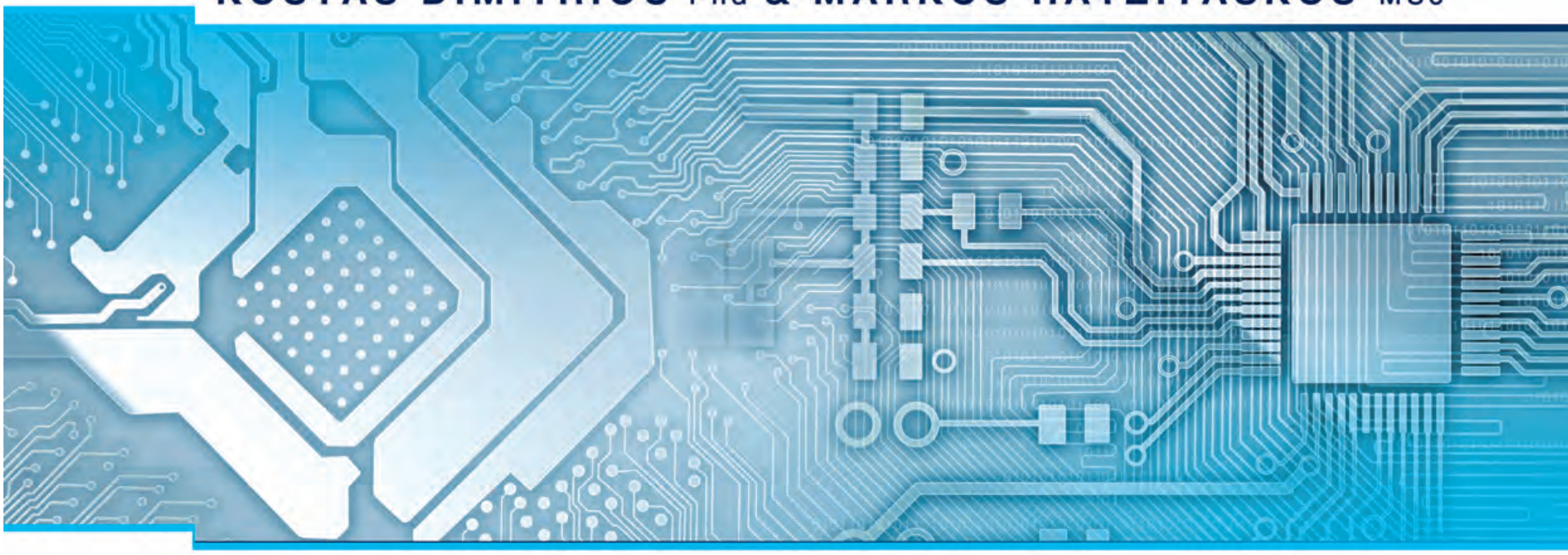
KOSTAS DIMITRIOU Phd & MARKOS HATZITASKOS MSc



CORE COMPUTER SCIENCE

For the IB Diploma Program

(International Baccalaureate)

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1. DP Computer Science Guide (first exams 2014):

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2. DP Computer Science guide (first exams 2004) pages 100-102:

```
static void output(String info),{  System.out.println(info);,},static void
output(char info),{  System.out.println(info);,},static void output(byte info),{
System.out.println(info);,},static void output(int info) {
System.out.println(info); },static void output(long
info),{  System.out.println(info);,},static void output(double
info),{  System.out.println(info);,},static void output(boolean info),{
System.out.println(info);,},static String input(String prompt),{  String inputLine
= "";,System.out.print(prompt);,try,{inputLine = (new java.io.BufferedReader( new
java.io.InputStreamReader(System.in))).readLine();},catch (Exception e),{ String
err = e.toString();,System.out.println(err);,inputLine = "";,},return
inputLine;,},static String inputString(String prompt) { return input(prompt);
},static String input(),{ return input("");,},static int inputInt(),{ return
inputInt(""); }, static double inputDouble(), { return inputDouble(""); },static
char inputChar(String prompt),{ char
result=(char)0;,try{result=input(prompt).charAt(0);},catch (Exception e){result =
(char)0;},return result;,},static byte inputByte(String prompt),{ byte
result=0;,try{result=Byte.valueOf(input(prompt).trim()).byteValue();},catch
(Exception e){result = 0;},return result;,},static int inputInt(String prompt),{
int result=0;,try{result=Integer.valueOf(,input(prompt).trim()).intValue();},catch
(Exception e){result = 0;},return result;,},static long inputLong(String prompt),{
long result=0;,try{result=Long.valueOf(input(prompt).trim()).longValue();},catch
(Exception e){result = 0;},return result;,},static double inputDouble(String
prompt) { double result=0; try{result=Double.valueOf(
input(prompt).trim()).doubleValue();},catch (Exception e){result = 0;},return
result;,},static boolean inputBoolean(String prompt) { boolean result=false;
try{result=Boolean.valueOf( input(prompt).trim()).booleanValue();},catch (Exception
e){result = false;},return result;,}
```

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Kostas’ Dimitriou Dedication

Dedicated to my father who taught me the value of human dignity and to my mother who taught me the value of truth.

Markos’ Hatzitaskos Dedication

Dedicated to my grandmother Elissavet, my mother Eleni-Maria and my brother Kostis, who have always been there for me.

Preface

Kostas Dimitriou holds a PhD in Spatial Decision Support Systems and Environmental Planning, and has taught computer science courses in various undergraduate and postgraduate University courses. He has participated in many scientific conferences and workshops, twenty research projects, and presented sixty scientific articles. He teaches the IB computer science course in the Hellenic American Educational Foundation since 2002. He is a Microsoft Certified Educator**,** Microsoft Expert Educator and Microsoft Expert Education Trainer. {kdimitriou@haef.gr}

Markos Hatzitaskos holds an MSc in Advanced Computing and has taught computer science courses throughout all school levels (from primary to high school and the I.B.). He currently teaches in the Hellenic American Educational Foundation since 2011. In his free time, whenever that might be, he develops mobile applications and attends the Athens School of Fine Arts as an undergraduate. {markosh@haef.gr}

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The purpose of this document is to facilitate learning and help our colleagues and CS students around the world. This book is based on the IB computer science syllabus and follows the IB computer science syllabus. The authors did their very best to cite all resources used. If you find a source that is not properly cited please report it to authors. This book was inspired by the book[1]: Jones, R & A. Meyenn. (2004). Computer science Java Enabled. International Baccalaureate. Series, IBID press, Victoria.

[1] Jones, R & Meyenn, A. (2004). Computer science Java enabled. International Baccalaureate. Series, IBID press, Victoria.

The following IBO documents were used during the development of this book:

1. International Baccalaureate Organization. (2004). IBDP Computer Science Guide.
2. International Baccalaureate Organization. (2012). IBDP Computer Science Guide.
3. International Baccalaureate Organization. (2012). IBDP Approved notations for developing pseudocode.
4. International Baccalaureate Organization. (2012). IBDP Java Examination Tool Subset.
5. International Baccalaureate Organization. (2012). IBDP Pseudocode in examinations.

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