

Cracking the Coding Interview

189 Programming Questions and Solutions

Cracking the Coding Interview

189 PROGRAMMING QUESTIONS AND SOLUTIONS

Introduction

Conclusion

About Author

This book is dedicated to all programmers of the world.

Copyright © 2016-2036 Chinmoy Mukherjee

All rights reserved. No text of this book may be reproduced in any form or by any electronic or mechanical means, including information storage and retrieval systems, without written permission from the publisher or author, except in the case of a reviewer, who may quote brief passages embodied in critical articles or in a review.

Introduction

We present 189 interesting java, database and C programming interview questions and answers for readers to practice and crack any programming interview. The reader is encouraged to try the programming questions himself/herself before checking the answers.

1. What is output of following program? `byte[] a = {1,2,3}; byte [] b = (byte[]) a.clone(); print(a==b)`

Answer: False

2. Can you have virtual function in java?

Answer: Yes, all non static functions are virtual

3. Can a lock be acquired on a class?

Answer: Yes, by using synchronized static method

4. What pattern will you use to improve following code
`if (object instanceof a) dosomethiga if (object instanceof b) dosomethigb`

Answer: We can use visitor pattern

5. How to provide secure web services?

Answer: We can use HTTPS protocol

6. What is wsdl used for?

Answer: wsdl is used to describe the structure of client request and server response

7. Is java call by value or call by reference

Answer: Java uses reference for object, value for primitive

8. What is the output of the below code and explain?

```
public static void main(String[] args) {  
    Employee e = new Employee();  
    e.setEname("PPPP");  
    int i = 99;  
    testO(e, i);  
    System.out.println(e.getEname());  
    System.out.println(i); 99  
}  
  
public static void testO(Employee e, int i) {  
    e.setEname("AAAA");  
    i = 100;  
}
```

Answer: AAAA (Call by reference), 99(Call by value)

9. What is the difference between Web Server and Application Server?

Answer: Web Server can host web applications only. Application server can host both web and non web applications supporting protocols other than HTTP e.g. RMI, RPC, etc.

10. Write a sample code to print the below pattern where n is number of rows.

```
*  
* *  
* * *  
* * * *
```

Answer:

```
for(int i=1; i<=n; i++) {  
  for(j=0; j<i;j++) {  
    System.out.print("*");  
  }  
  System.out.print("\n");  
}
```

11. Write the code for above pattern using java recursion

Bestselling books by Chinmoy Mukherjee: Cracking the Coding Interview, Artificial Intelligence, Software Engineering, Reimagining India, Ignited Minds, The Heart of Meditation, Project Management For Dummies <https://www.linkedin.com/in/chinmoym>
<http://crackingthecodinginterview.in/>

Conclusion

Hope this programming interview questions and answers book makes you better prepared for next interview. Please devote some time to write new programs on a daily basis. This will help you to keep up to date with latest programming developments.

Bestselling books by Chinmoy Mukherjee: Cracking the Coding Interview, Artificial Intelligence, Software Engineering, Reimagining India, Ignited Minds, The Heart of Meditation, Project Management For Dummies <https://www.linkedin.com/in/chinmovm>
<http://crackingthecodinginterview.in/>

About Author

Chinmoy is an author, innovator, entrepreneur and solution architect. He has written dozen books on "software technology", "social science" and "adult coloring". He loves mentoring people. Please feel free to contact him at

<http://www.linkedin.com/in/chinmoym> or leave a comment at <http://crackingthecodinginterview.in/>