

91.406/534 Compiler Construction: End-Course Test Questions

The Fall '08 91.406/534 class has adopted an NSF-sponsored system-oriented approach of using robot systems to teach compiler construction. To gather research data on the effectiveness of the method, we would like you take the following end-class test. Your participation is completely voluntary and will not in any form affect your standing or grade in the class. If you don't know the answer of the question, you can simply write N/A.

Untraceable ID Code	Instructions for creating your Untraceable ID Code														
<table border="1"><tr><td> </td><td> </td><td> </td><td>-</td><td> </td><td> </td><td> </td></tr><tr><td>1</td><td>2</td><td>3</td><td></td><td>4</td><td>5</td><td>6</td></tr></table> <p>(For research purposes only)</p>				-				1	2	3		4	5	6	<p>Box 1 – Your middle initial Box 2 – The first initial of your mother's first name Box 3 – The first initial of your father's first name Boxes 4 & 5 – Your two digit birth month Box 6 – The number of older siblings you have</p> <p>If any of these are not applicable use an X</p>
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1	2	3		4	5	6									

1. Define what is a compiler, as precisely as you can?
2. Why is compiler considered an important technology in modern systems?
3. What is the typical structure of compiler?
4. How does compiler understand input programs?
5. How does compiler generate output?
6. What are the key parts of the compiler front-end?
7. How is the compiler front-end constructed?
8. Why does modern compiler design focus on compiler back-end?
9. What is compiler optimization?
10. What information does compiler get in control flow analysis?