

How to Complete a Research Task

1. Determine a 中心思想 of the selected topic : Begin with the end in your mind.
2. Conceptual design (Think Big) (You should have done detailed literature survey to clearly explain why your research issue is important and unique.)
3. Problem definition (as specific as possible)
4. Mathematical modeling your problem
5. develop algorithm / analysis framework (Think different) (keyword: Ask **WHY NOT**, instead of just asking why)
6. Performance estimation : Estimation what performance should be got. Think before writing any program.
7. Obtain preliminary results / pilot run / simple case analysis to justify your conceptual design (**Check your fundamental concept carefully**)
8. Design of performance results (**Think what conclusion you expect to make before doing any extensive simulation**)
9. Analytical calculation to obtain the detailed performance results (Think simple. Try to explain your results in a simple and logical manner.)
10. Extensive simulations to validate your analytical results.
11. Writing a formal report. (Remember that your job just finish 50%. Starting the 5 "D" writing process as soon as possible.)