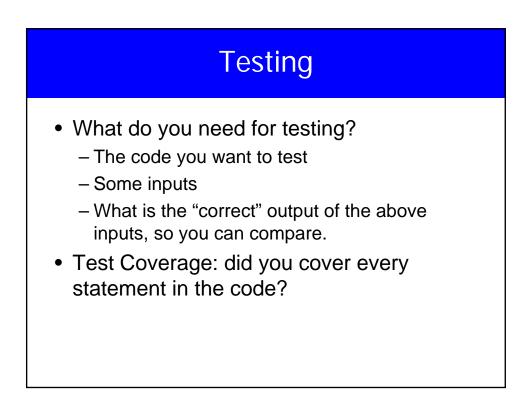


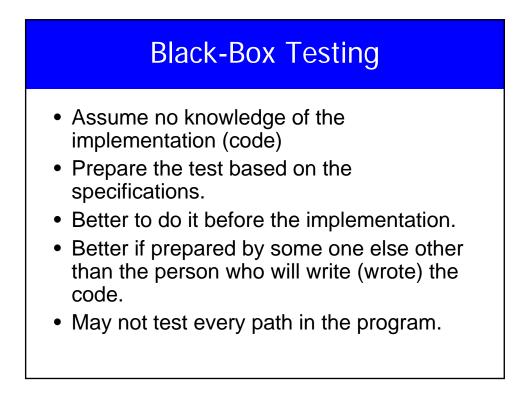
Testing

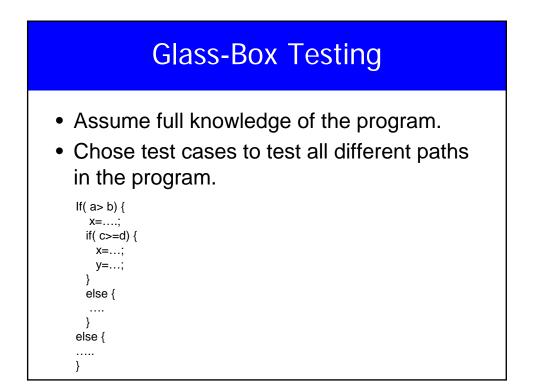
- Best way to write bug-free code, generate it by **correct (bug-free)** program.
- Do not wait till you complete the program to test it, test every piece that you write (function, block, if, ...)
- If you wait until something breaks, you probably have forgotten what the code does.

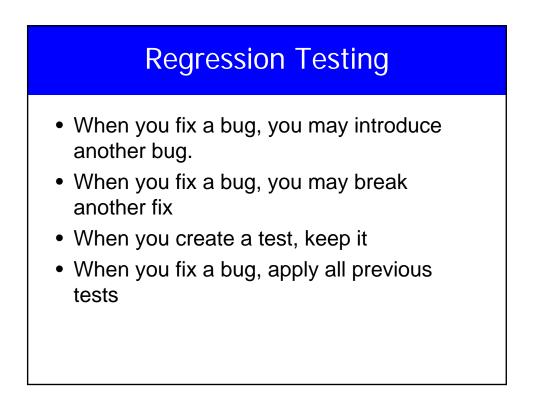


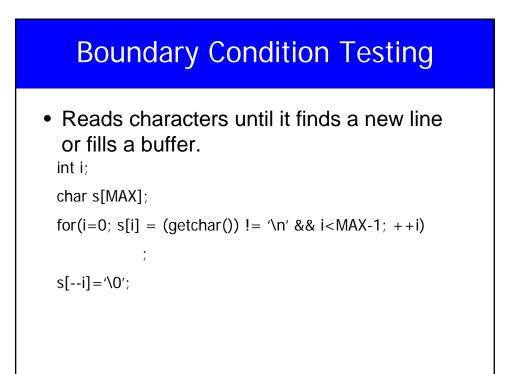
Random Testing

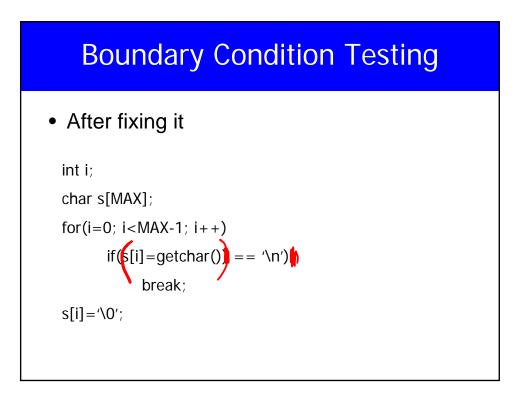
- Random inputs to the program
- · Easy to do
- Without a statistical framework, the results are meaningless.

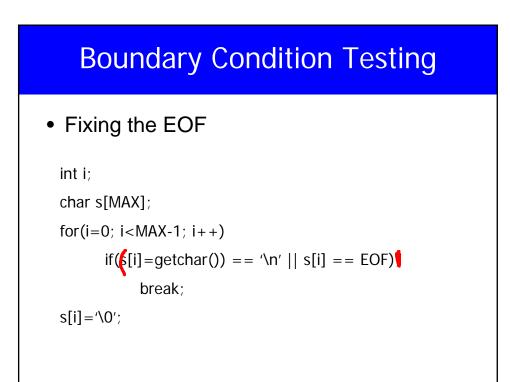


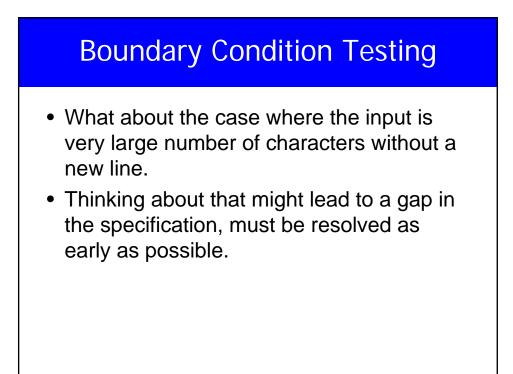


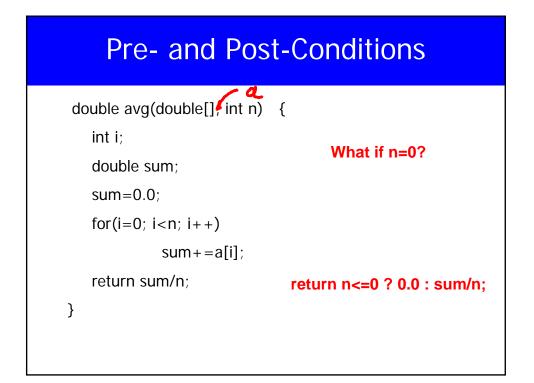


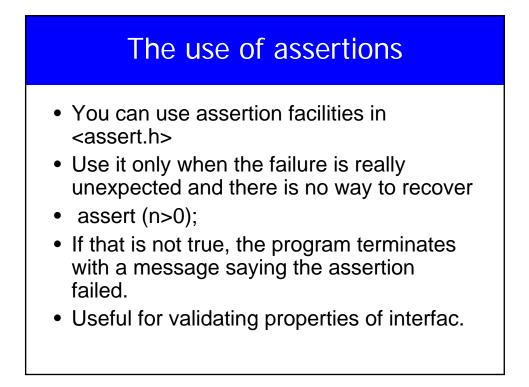


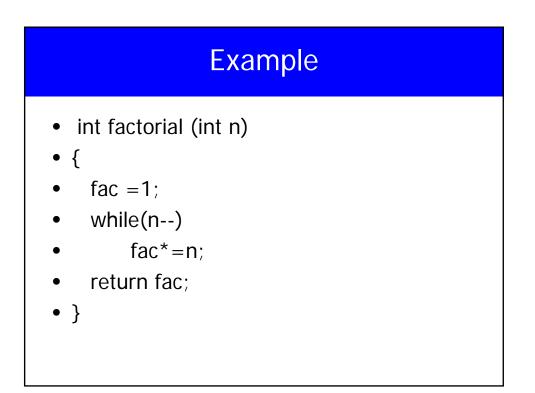


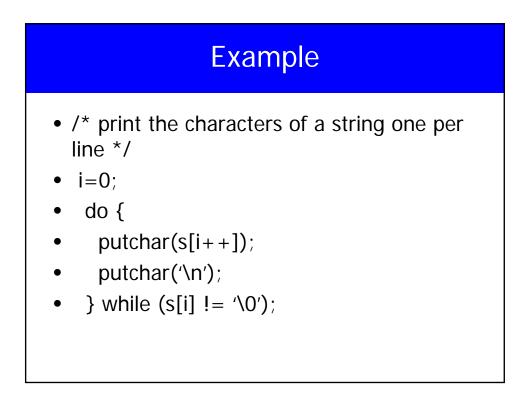












Example	
 Binary search, what to test for Array with 0 elements One element, key is <,=,> the element Two elements, try all five combinations 	 Duplicate elements, try all different combinations of key Three elements, all different combinations Four elements, If passed, probably OK