

7. If p is false and q is true, $p \Rightarrow q$ is false. True or false? **Answer:** False. Any implication whose premise is false is true.
8. Who is or was A.M. Turing? **Answer:** Founder of computer science, mathematician, philosopher, codebreaker. He lived from 1912–1954. See <http://www.turing.org.uk/turing/>.
9. The first general-purpose programmable digital electronic computer was built in 1931. True or false? **Answer:** This is definitely false. However, it is a matter of debate when the first general-purpose programmable digital electronic computer was built. See, e.g., <http://www.turing.org.uk/turing/scrapbook/computer.html> for a discussion of this issue. Another good reference is the interview with Maurice Wilkes, the designer and builder of EDSAC, the first computer with an internally stored program in *Communications of the ACM*, 52, 9 (September 2009), 39–42. Yet another is the table at http://en.wikipedia.org/wiki/History_of_computing_hardware. Note that Wilkes takes very much an engineering view of this matter. As Hodges puts it at <http://www.turing.org.uk/turing/scrapbook/computer.html>, "Behind these confusions [about who invented the computer and when] there lies a basic disagreement about whether the computer should be placed in a list of physical objects—basically the hardware engineers' viewpoint—or whether it belongs to the history of logical, mathematical and scientific ideas, as logicians, mathematicians and software engineers would see it. I follow the second viewpoint: the essential point of the stored-program computer is that it is built to implement a logical idea, Turing's idea: the Universal Turing machine of 1936. Turing himself referred to computers (in the modern sense) as 'Practical Universal Computing Machines'."
10. According to the November 2009 US Bureau of Labor Statistics ten-year forecast of job growth, among all occupations in all fields of science and engineering, computer science occupations are projected to account for nearly 60% of all job growth between now and 2018. True or false? **Answer:** True. See: <http://careers.cse.sc.edu/>, entry of Mon, 2010-01-04 18:34, and related links. The BLS report itself is at <http://www.bls.gov/opub/mlr/2009/11/art5full.pdf>.