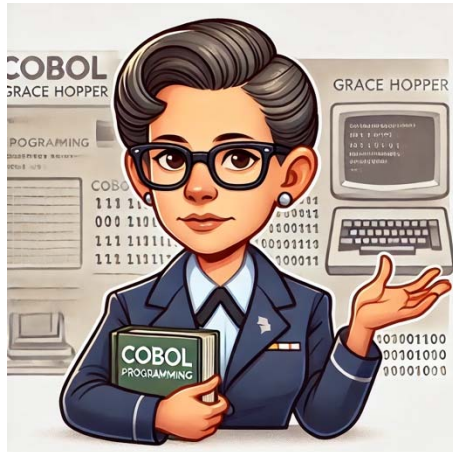


Name _____

Grace Hopper: The Woman Who Made Computers Smarter



Grace Hopper was a brilliant computer scientist and a trailblazer in technology. She helped create the first computer programming language and made computers easier for people to use. Because of her hard work, she is remembered as one of the most important figures in computer science.

Early Life and Education

Grace Hopper was born on December 9, 1906, in New York City, USA. She was a curious and intelligent child who loved solving puzzles and taking things apart. One day, she even took apart her family's alarm clock just to see how it worked! She was also very good at math

and science. When she grew older, she attended Vassar College, where she studied mathematics and physics. Later, she earned a Ph.D. in mathematics from Yale University, which was a great achievement for a woman at that time.

Joining the Navy and Working with Computers

During World War II, Grace Hopper wanted to help her country, so she joined the United States Navy. She was assigned to work on one of the first computers, the Harvard Mark I. This huge machine helped solve difficult mathematical problems for the military. Hopper quickly became an expert in computers. She believed that computers should be easier for people to use. In the early days, computers only understood binary code, which is made up of long strings of 1s and 0s. This was very difficult for most people to read and write.

Inventing the First Programming Language

Grace Hopper had a big idea—she wanted to create a way for computers to understand words instead of numbers. In 1952, she invented the first computer programming language called COBOL (Common Business-Oriented Language). COBOL allowed people to write instructions for computers in simple English words instead of complicated codes. Her invention changed the world! Businesses, banks, and governments used COBOL to run their operations. Even today, many companies still use COBOL in their computer systems.

The Famous Computer "Bug" Story

One of the most famous stories about Grace Hopper is how she helped fix a computer problem caused by a real bug. One day, a computer wasn't working properly, and she discovered that a moth had gotten stuck inside the machine! This led to the term "debugging," which means fixing computer problems.

Legacy and Later Years

Grace Hopper continued working in computer science for many years. She became a professor, gave speeches, and inspired many young people to study computers. She also earned many awards, including the Presidential Medal of Freedom, the highest award a U.S. citizen can receive. She passed away on January 1, 1992, but her work lives on. Today, she is remembered as a pioneer who made computers easier to use and helped shape the digital world we live in.

