Alan Turing, known as the father of computer science, make an enormous contribution to the development of computer programming. Alan Mathison Turing was born in 1912 in London. Turing exhibited exceptional talent in mathematics and science from a young age, which led him to King's College London. In 1936, Turing published an important paper, "On Computable Numbers, with an Application to the Entscheidungsproblem," in which he introduced the concept of the Turing machine, which is a theoretical construct that could simulate the logic of any computer algorithm. It became a cornerstone of the theoretical computer science, providing the first model of algorithmic process. This concept of a machine that could compute anything computable was revolutionary, laying foundation work for modern computer programming. Turing's most famous contribution came during World II, when he joined the Government Code and Cypher School at Bletchley Park. He played an important role in deciphering the Enigma machine, an encryption device used by Nazi Germany. After the war, Turing continued to innovate in the filed of computer science. He worked on developing one of the first designs for a stored-program compute , the Automatic Computing Engine, at the National Physical Laboratory. Turing also delved into artificial intelligence and posed the famous Turing Test, a test for determining a machine's ability to exhibit intelligent behavior indistinguishable from that a human. On June 7, 1954, Turing was found dead from cyanide poisoning, a tragic end to a brilliant life. In 2009, the British government formally apologized for the way Turing was

treated, and in 2013, Queen Elizabeth II granted him a posthumous royal pardon. In 2021, Turing's face was featured on the £50 note, symbolizing his lasting impact on both British history and the field of computing.