History of Electronics

I. THE FIRST ELECTRONIC DEVICE IS CONSIDERED TO BE THE THERMIONIC VALVE, OR VACUUM TUBE, WHICH WAS INVENTED IN 1904. THESE DEVICES WERE USED IN EARLY RADIOS AND WERE THE PRECURSOR TO MODERN ELECTRONIC COMPONENTS SUCH AS TRANSISTORS AND INTEGRATED CIRCUITS.

II. THE FIRST TRANSISTOR WAS INVENTED IN 1947 BY RESEARCHERS AT BELL LABS. TRANSISTORS ARE TINY ELECTRONIC DEVICES THAT CAN AMPLIFY OR SWITCH ELECTRONIC SIGNALS AND ARE THE BUILDING BLOCKS OF MODERN ELECTRONICS.

III. IN 1958, THE FIRST INTEGRATED CIRCUIT, OR MICROCHIP, WAS DEVELOPED BY JACK KILBY AT TEXAS INSTRUMENTS. THESE TINY DEVICES CAN CONTAIN MILLIONS OR EVEN BILLIONS OF TRANSISTORS AND ARE USED IN EVERYTHING FROM COMPUTERS TO SMARTPHONES TO MEDICAL DEVICES.

IV. THE FIRST PERSONAL COMPUTER, THE ALTAIR 8800, WAS RELEASED IN 1975. IT WAS SOLD AS A KIT THAT USERS HAD TO ASSEMBLE THEMSELVES AND HAD NO KEYBOARD OR DISPLAY.

V. THE FIRST MOBILE PHONE, THE MOTOROLA DYNATAC 8000X, WAS RELEASED IN 1983. IT WAS THE SIZE OF A BRICK AND HAD A TALK TIME OF JUST 30 MINUTES.

VI. THE FIRST TOUCHSCREEN SMARTPHONE, THE APPLE IPHONE, WAS RELEASED IN 2007. IT REVOLUTIONIZED THE WAY PEOPLE INTERACT WITH THEIR PHONES AND HAS SINCE BECOME ONE OF THE MOST POPULAR AND INFLUENTIAL ELECTRONIC DEVICES IN HISTORY.

VII. IN 2010, THE IPAD WAS RELEASED, MARKING THE BEGINNING OF THE RISE OF TABLET COMPUTERS. THESE DEVICES HAVE SINCE BECOME POPULAR FOR THEIR PORTABILITY AND VERSATILITY, WITH MANY PEOPLE USING THEM FOR TASKS SUCH AS READING, BROWSING THE INTERNET, AND WATCHING MOVIES.

VIII. THE INTERNET OF THINGS (IOT) IS A NETWORK OF INTERCONNECTED DEVICES THAT ARE ABLE TO COMMUNICATE AND EXCHANGE DATA WITH EACH OTHER. IT IS EXPECTED TO HAVE A SIGNIFICANT IMPACT ON THE WAY WE LIVE AND WORK, WITH BILLIONS OF DEVICES EXPECTED TO BE CONNECTED BY THE END OF THE DECADE.

IX. ROBOTICS IS A FIELD THAT INVOLVES THE DESIGN AND CONSTRUCTION OF ROBOTS, WHICH ARE AUTOMATED MACHINES THAT CAN PERFORM TASKS WITHOUT HUMAN INTERVENTION. ROBOTICS

HAS MANY APPLICATIONS, INCLUDING MANUFACTURING, HEALTHCARE, AND SPACE EXPLORATION.

X. ARTIFICIAL INTELLIGENCE (AI) IS A FIELD OF COMPUTER SCIENCE THAT FOCUSES ON THE DEVELOPMENT OF INTELLIGENT COMPUTER SYSTEMS THAT CAN PERFORM TASKS THAT NORMALLY REQUIRE HUMAN INTELLIGENCE, SUCH AS LEARNING, PROBLEM-SOLVING, AND DECISION-MAKING. AI HAS THE POTENTIAL TO REVOLUTIONIZE MANY FIELDS, INCLUDING HEALTHCARE, EDUCATION, AND TRANSPORTATION.

XI.

XII.

XIII.

XIV.

XV.