1)

Narrow AI can be defined as AI that does not have AGI; basically, any AI in use today is narrow AI. These structures can handle a single or limited task. Nonetheless, this targeted technique yields effective capabilities.

The final vision of AI structures capable of handling a wide range of cognitive tasks. Artificial general intelligence is the concept of a single, general intelligence that can act and think like a human.

Scientists have struggled to develop an AI that can meet some of these requirements. As time passed, the original concept of AI, in which the device was required to mimic the human mind and its questioning process, found itself in a completely new class – a type of AI known as General AI or Artificial General Intelligence (AGI).

Despite this, researchers agree that the concept of AGI becoming a reality is a long way off. Much of that declaration stems from the fact that today's AI structures aren't even capable of performing tasks that a human toddler can.

As a result, scientists and researchers have developed a number of useful technologies on their way to developing an AI device that can mimic humans. Every time this type of technology is developed, it is hailed as a breakthrough. The next time something extra beneficial and sensible is created, it serves as a model for future technology.

Narrow AI is a term that encompasses some of these advantageous technologies. According to the definition, narrow AI is best suited to carrying out a single mission – or a limited set of tasks – and can sometimes outperform humans.

But the problem with narrow AI is that it fails as soon as it is placed in a specific setting or is asked to perform a mission that is not related to what it excels at. They are unable to transfer their knowledge from one subject to another.

2)

If a system of data manipulation rules (such as a computer's instruction set, a programming language, or a cellular automaton) can be used to simulate any Turing machine, it is said to be Turing-complete or computationally universal in computability theory.

But, in layman's terms, what does this mean? The question was how to determine whether a mathematical task could be computed. Turing came up with an abstract idea of a machine (Turing machine) that can mimic any problem if it can be coded in order to answer this query (or logically constructed). It doesn't consider how much time or resources (CPU, memory) will be required to solve the problem, but it is clear that the machine will provide an output for a given input.

When someone states "x is Turing Complete," they are implying that it might theoretically be utilised to solve any computer problem. Turing machines are comparable to finite automata/finite state machines, except that they are not constrained by memory or runtime.

3)

Turing completeness, as previously stated, refers to the specific algorithm or language code employed for data protection. The Turing completeness method aids in the solution of crucial problems in software systems in the actual world of computers and technology. Bitcoin was the first cryptocurrency to enter the market at a higher level in the cryptocurrency industry. It was the first to appear when the Turing completeness process began, and it offers investors a way to invest and profit handsomely.

Bitcoin, on the other hand, has been shown to function with restricted Turing completeness; it is based on finite code and functions that are pure and have limited functions and interpretations. With a minimal computer programme and hardware, it was Turing-completed. Bitcoin has more programming limitations than Ethereum because to its restricted computer. Bitcoin, in particular, is restricted to problem-solving and receives only sporadic support from Turing machines. Ethereum, unlike Bitcoin, is a completely Turing-completed cryptocurrency.

4)

Artificial intelligence and blockchain technology have the potential to transform how we work, travel, relax, and organise our communities and daily lives. Artificial intelligence was instrumental in accelerating the development and production of COVID-19 vaccines, while blockchain has the potential to not only disrupt the financial system, but also to improve greenhouse gas emissions tracking and reporting, commercial transportation optimization, and data privacy protection. The continued development of these technologies, led by ethical and sustainability standards, has the potential to open up new avenues for human progress, propelling technology solutions that will make our societies truly digital and greener, and eventually maintain the planet habitable.

**Blockchain Empowers Artificial Intelligence**

* Transparent and Reliable Data Sources
* Strong Fairness Guarantee
* Efficient Autonomy
* Privacy Protection
* Distributed Computing Power

##### Artificial Intelligence Empowers Blockchain

* Security
* Efficiency