**What is AI? (200 words)**

Artificial intelligence (AI) can be defined as using technology that enables a computer to simulate the capacity for abstract, creative, deductive thought – or “human” thinking and behavioural processes. AI is usually pre-programmed, but this does not limit or inhibit its ability to learn and take in information from its surrounding environment – AI can make decisions and responses based on what it has learned or sensed. The intended purpose for AI was to create machines that can think like humans; already machines are improving their ability to 'learn' from mistakes and change how they approach a task the next time they try it. Some researchers are going one step further and even trying to teach AI about feelings and emotions.

AI research and development work can be broken down into two branches: applied, specialised AI, and generalised AI. Applied specialised AI used principles of simulating human thought to carry out specific tasks, such as diagnosing disease in patients or predicting faults in manufacturing equipment before they occur. Generalised AI seeks to develop intelligent machines that can complete any task, much like a person. This area is less developed than specialised AI, since it requires a more complete understanding of the human brain than we currently have, and more computing power than is commonly available to researchers (but quantum computing will change all this).

AI is used in our daily lives; for example, Netflix uses AI to optimise content recommendation based on what users have previously watched to suggest similar titles. Additionally, many videogames, particularly of the horror genre, incorporate antagonists that are controlled using machine learning – which is a subset of AI.

**Where is it currently used in accounting / and finance? (200 words)**

“As artificial intelligence has done for many industries, it’s making a significant impact in the world of Accounting and Finance. From saving time and money and providing insights, AI-enabled systems for accounting and finance are the way finance professionals and their firms will stay competitive and attract the next generation as employees and customers”. (Bernard Marr, 2020)

AI plays a role in portfolio management, trading, and portfolio risk management. Portfolio management is something that uses AI to improve facilitating fundamental analysis to process quantitative data, images or textual data and generate new investment strategies. AI helps produce better asset returns and risk estimates and solves portfolio optimisation problems. All these result in AI achieving portfolios with better performances compared to traditional approaches.

The use of AI has also been integrated in different financial softwares; such as, FreshBooks, Xero, Sage, Kashflow, and more.

AI techniques that learn and evolve using data can help in monitoring risk. Specifically, AI approaches can extract information from various sources of structured or unstructured data more efficiently and produce more accurate forecasts of bankruptcy and credit risk, market volatility, macroeconomic trends, financial crises and more than traditional techniques. AI also assists risk managers in the validation and back-testing of risk models. AI techniques have also started gaining popularity in new practices, such as robo-advising, which is where computer programs provide investment advice tailored to the needs and preferences of investors.

**The advantages and benefits of AI (in accounting/finance) and the disadvantages/drawbacks? (200 words)**

Examples of beneficial AI use in Accounting include:

1. Pay/receive processing: Existing AI-based invoice management systems are helping finance clients in making invoice processing efficiently. Digital machines using AI are learning the accounting codes that best suits for every invoice.
2. Supplier Onboarding: The AI-powered systems can screen the suppliers by examining their tax details or credit scores. AI tools can set all suppliers in the systems without the need for humans.
3. Audits: Digitisation in the audit process enhances the security level. Using a digital tracker, the auditors can track each file that is accessed. Rather than searching all paper documents, the digital files can ease the audit work. Thus, artificial intelligence in accounting and auditing helps to record every financial transaction of the company.
4. Monthly/Quarterly Cash Flows: The AI-powered machines can collect data from many sources and integrate that data. AI tools not only speed up processes, but they make financial processes accurate and secure.
5. Expense Management: Revising and finalising expenses to confirm that they are compliant according to the company’s norms is a difficult task. The manual process consumes more time for your finance team. Instead of humans, machines can do these tasks quickly and efficiently. AI machines can read all receipts, audit the costs, and also alert the human workforce humans when a breach occurs.

Disadvantages of AI include that it requires a large amount of data. Data and quality are critical to the success of artificial intelligence systems. Without enough valid data, the models simply cannot learn. The data on transactional accounting data are well structured and of high quality and, therefore, should be a promising starting point for the development of the model. Another limitation of the principles will be privacy and ethics, especially when systems of intellectual property are based on personal data.

**Can AI completely replace humans in accounting? Why / why not? (200 words)**

The revolution of Artificial Intelligence in accounting will not be a slowdown in any way. AI technology has the full capability to perform all mundane tasks of accountants. However, it does not mean that it will replace accountants. Human intelligence will always be needed to perform and run technology efficiently. The companies require accountants for interpreting and analysing data captured by AI-machines. Moreover, accountants will play a significant role in providing consulting services better than machines. As AI and ML perform repetitive tasks with more efficiency, accountants can save their time and focus on other general functions like data analysis and consulting services. So, the future of accounting jobs will be automated and intelligently supported by AI, not replaced by it.

**Is AI / AI incorporation the future of accounting? (200 words)**

AI will be beneficial in the future in order minimise the number of mistakes made, and the time spent on analysing data. It will then free up time for accountants and people in the financial sector to entice more clients to use them due to the speed and the minimum amount of mistakes.