**Artificial Intelligence Workshop 1**

**Task 1: Definitions in AI**

An expert system is a piece of software which uses databases full of expert knowledge in specialized domains in order to aid the user with advice. The advice given to the user through the expert system allows decisions to be made in specialised domains such as the medical industry.

A knowledge based system is a system which uses reasoning as well as knowledge in order to solve problems which have a high complexity. They use AI and expert system techniques such as a stored database containing knowledge of specialised domains with linkages to facilitate the systems response to queries or to efficiently transfer knowledge to another domain.

Classical AI is the branch in AI which consists of rule based systems in order to map human reason and represent human knowledge in a form of facts and rules. Classical AI is where the system is given a range of constraints and must deduce a conclusion from these given restraints.

Connectionist AI is an AI approach which aims to discover how our brain works at a neural level. This branch of AI is concerned with how the human brain remembers suggesting that information is stored through connection strengths between neurons represented by a neural network.

The difference between classical and connectionist AI is that classical AI is concerned with rules, facts and symbols in order for conclusions to be made whereas connectionist AI is concerned with how to brain works and states that information is not stored through symbols as in classical but through connection strengths.

**Task 2: Capabilities of AI today**

**Task 3: Chatbots**

The chatbot which I interacted with was iBot. iBot was better when dealing with feelings due to the fact that a key list of questions or statements where already prepared by the system. Keywords within my text where looked for so that when recognised by the chatbot predetermined responses could be output. This differs compared to when I was talking about the weather. The chatbot did not have any real time responses so struggled when talking about the weather. In order to counter my statements, the chatbot would change the subject to what food I like. I believe that underneath the system is looking for key words and phrases within my statements and then using them to find predetermined responses which link to the key words which I have used.

**Task 4: The ongoing debate**

1. I believe that the main statement which the open letter is attempting to get across is the fact that we should stop trying to further AI just to further it and now use it in order to gain more societal benefits. This is important because we have a unique product here but the majority of research is focussed on making AI even more capable than it already is. Therefore research should be more focussed on using AI to maximise the benefit of it. This is getting the most out of the technology which we have before furthering its capabilities.

“Artificial Intelligence May Doom The Human Race Within A Century”

1. Super intelligent AI could become dangerous to humans as it will seek to improve itself and acquire resources.
2. Improving the human condition, advancing human values
3. Super intelligent AI could start a war.