✓ **Congratulations! You passed!**
TO PASS 80% or higher

Keep Learning

GRADE
100%

Alpha Go

TOTAL POINTS 5

1. In this quiz I would like you to do some independent research about a high profile area of AI: playing games. One of the achievements of AI in recent years has been Alpha Go: software that beat a world champion at the game Go.

   I would like you to research two important game playing programmes: IBM Deep Blue and Alpha Go and how they are different. Then answer the following questions.

   A simple web search should reveal some useful information. If you don't know the answer to any question, feel free to go back and do some more research before finished the quiz.

   Firstly, what game was Deep Blue famous for playing?

   ○ Go

   ○ tic-tac-toe

   ○ Poker

   ◉ Chess

   1 / 1 point

   > ✓ **Correct**
   > Yes, that is right

2. Since his defeat by Deep Blue, Garry Kasparov has championed "Advanced Chess". What is that?

   ○ New chess rules that are so difficult only computers can play it

   ○ Several humans working together to beat a computer at standard chess

   ◉ Human players working with computer to play standard chess

   ○ New chess rules that are too difficult for computers to win at

   1 / 1 point

   > ✓ **Correct**
   > Yes, even if computers can be better than humans at something, humans and computers working together are often even better.

3. Why is the game Go considered much harder than chess for computers?

   ○ The rules are much more complex

   ○ There are many more types of piece

   ○ Go is a game of chance

   ◉ The number of possible variations of a Go game is much larger

   1 / 1 point

   > ✓ **Correct**
   > Yes, even though the rules are simple, the number of possible moves and therefore possible games is much, much higher than chess

4. What AI method does Alpha Go use?

   ◉ Neural networks

   ○ Expert Systems

   ○ Brute force calculation

   ○ Logic rules

   1 / 1 point

   > ✓ **Correct**
   > Yes, it uses a range of methods but neural networks are probably the most important.

5. Why was Alpha Go able to play Go so well?

   ○ Expert mathematicians analysed the game of Go and designed the best algorithms for playing it.

   ○ It used the same methods as Deep Blue, but was able to play a more complex game because more computing power was available in 2016 than in 1997

   1 / 1 point

power was available in 2016 than in 1997

◉ It "learned" to play from famous games and playing against itself.

◯ It used rules designed by some of the best Go players in the world

---

✓ **Correct**
Yes, Alpha Go is a high profile example of "Machine Learning", which we will learn about next