

AIML2026 ASSIGNMENT 02

(Due Date: March 11, 2026)

Instructions: You need to answer all questions in this assignment and your answers must be in English. Moreover, the following points should be noted.

- If you use a word processing software to edit your answer, please make sure that the answer file is either in WORD or PDF format.
- You need to submit the answer file before the due date to the Gmail account `johnsum.nchu@gmail.com`.
- Email heading must be conformed to `AIML2026_Assignment02_studentID`.
- Filename must be conformed to `AIML2026_Assignment02_studentID`.
- It is a bonus assignment. If you are too busy to complete the assignment, you can just skip it and then send me an email via the same Gmail account informing me that you are unable to submit the answer file.
- Your answer file must be submitted before time 00:00 of the due date.

The assessment of this course is solely depended on your work in the course project including your written report and your oral presentation. The scores obtained from the assignments are bonus to be added to your project score.

Read the document "Introduction to Intelligent Technology" and then answer the following questions.

Question 1

With reference to John Sum's point of view, intelligent technologies could be categorized as two types, namely Type I and Type II.

- (a) Describe the differences between Type I and Type II technologies.

- (b) State which type the ChatGPT should belong to and give your reason(s).

- (c) State which type the associative memory should belong to and give your reason(s).

Question 2

With reference to John Sum's point of view, all living organisms are intelligent.

- (a) Give the reason why John Sum makes this claim.

- (b) What are the two additional properties of intelligence?

- (c) What is the difference between the terms "intelligence" and "intelligent"? Note on the difference between "ce" and "t" at the end of the words.

- (d) Could the phrase "artificial intelligence" be used for a dog? For instance, a dog is trained to play a piano. If it succeeds, can we say that the dog has artificial intelligence?

Question 3

It should be noted that a computer system is simply a number-in-number-out computing machine which is able to perform so many computing tasks.

- (a) Is an AI system a number-in-number-out computing machine? Yes or no?

- (b) State the full names for CPU and GPU.

- (c) What is the key difference between a CPU and a GPU?

- (d) GPU is a major driving force for the advancement of an AI system. Why?