G1 Team 3

Answer the question

+ Lesson 03

1. (Sreypin) Why do we need pointer?

* You can use pointer notation to operate on data stored in an array, which often executes faster than if you use array notation.
* It enables us to pass variables to the function that is called calling by reference
* Pointers are a vital element of C/C++ programming.
* Pointers are important because they form the foundation that enables you to allocate and use memory dynamically during program execution.
* You can create new variables while your program is executing, as and when you need them.
* Because you don’t know in advance how many variables you going to create dynamically, the only way you can do it is by using pointer.

1. (Nara) The differences between address-of and indirection operation:

* The address-of operator (&) is used to obtain the memory address of a variable. When you use & before a variable name, it returns the address where that variable is stored in memory.
* The indirection operator (\*), also known as the dereference operator, is used to access the value stored at the address pointed to by a pointer. When you use \* before a pointer variable, it returns the value stored at the memory address the pointer is pointing to.

1. (Panha) The differences between static and dynamic memory allocation:

* Static memory allocation, the memory can not be changed while executing a program. It is preferred in a normal datatype or an array.
* Dynamic memory allocation, while executing a program, the memory can be changed. It is preferred in a pointer.

+ Lesson 05

1. (Chamrong) A structure is a user-defined data type that allows you to combine data items of different kinds (int, char, float, …). Example: we declared variable name Laptop that holds 2 different datatype which is the price(integer) of the laptop and the warranty of the laptop(string).
2. (Rith) How to declare a structure

* First syntax: The first write struct and put the name of the structure then declare put data in the structure example student name, ID or Group as int or char in data. then we can declare the struct and put the name of structure that have create and put the objects of the struct.
* Second syntax: The first write typedef struct and declare name of the structure and then put the data in the structure the create a nickname of the structure at the end of typedef. When declare you call the nickname and objects.

1. (Panha) The differences are between switch and structure:

* A switch statement is used for conditional branching, executing one block of code based on the value of an expression.
* A structure (struct) is a user-defined data type that groups together different variables under one name to create a complex data type.