

39 Lecture - CS201

Important Subjective

- 1. What is a pointer in C++?**
A pointer is a variable that stores the memory address of another variable.
- 2. How can you declare a pointer variable in C++?**
A pointer variable is declared by placing an asterisk (*) before the variable name.
- 3. How do you initialize a pointer to point to a specific memory address?**
You can initialize a pointer by assigning the address of a variable to it using the reference operator (&).
- 4. How do you access the value of the variable that a pointer is pointing to?**
You can access the value of the variable that a pointer is pointing to using the dereference operator (*).
- 5. What is the difference between a null pointer and a void pointer?**
A null pointer is a pointer that does not point to any memory location, while a void pointer is a pointer that can point to any data type.
- 6. What is pointer arithmetic?**
Pointer arithmetic refers to the arithmetic operations that can be performed on pointers, such as adding or subtracting an integer value to a pointer.
- 7. What is a function pointer?**
A function pointer is a pointer that points to a function instead of a variable.
- 8. What is a dangling pointer?**
A dangling pointer is a pointer that points to a memory location that has been deallocated or freed.
- 9. How do you avoid memory leaks when using pointers?**
You can avoid memory leaks by ensuring that you deallocate any dynamically allocated memory using the delete operator.
- 10. How do you use pointers to pass arguments to a function by reference?**
You can use pointers to pass arguments to a function by reference by passing the address of the variable to the function and then using the dereference operator to access the value of the variable.