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# C Pointer

# Content

- C Pointers
- Relationship Between Arrays and Pointers
- C Pass Addresses and Pointers

# Pointers

- Pointers are powerful features of C and C++ programming. Before we learn pointers, let's learn about addresses in C programming.
- Pointers is a variable the content is the address of another location in memory.

# Address in C

- If you have a variable var in your program, &var will give you its address in the memory.
- We have used address numerous times while using the scanf() function.
- scanf("%d", &var);

# Pointer Syntax

Here is how we can declare pointers.

- int* p;

Here, we have declared a pointer p of int type.

- You can also declare pointers in these ways.
- int *p1; int * p2;

# Pointer Syntax

Let's take another example of declaring pointers.

- int* p1, p2;
- Here, we have declared a pointer p1 and a normal variable p2.
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# Relationship Between Arrays and Pointers

**Relationship Between Arrays and Pointers**

- An array is a block of sequential data. Let's write a program to print addresses of array elements.
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# C Pass Addresses and Pointers

- In C programming, it is also possible to pass addresses as arguments to functions.
- To accept these addresses in the function definition, we can use pointers. It's because pointers are used to store addresses.

# Thanks!

## Any questions?