

A pointer which stores the address of a function
So they are invoked dynamically

⇒ Declaration

return_type (* pointer_name)(parameter_types)

ex. int (*fptr)(int, int)

* The function pointer should be declared in the same way that it matches the signature of the function

⇒ Initialization

pointer_name = &function_name

OR: pointer_name = function_name

Notes ⇒ * Cannot perform arithmetic operations like ++, --

* Can point to different functions with matching signatures

Accessing elements of a 2nd dimensional Array using Pointers

ex. `int arr[2][2]`

`arr` \Rightarrow pointer that points to the first row of `arr`

`arr+1` \Rightarrow " " " " " second " " "

`*(arr+1)` \Rightarrow Now, It is the second row as array

ليس ما زال عنوانه لل columns

$\therefore *(* (arr+1) + 1) \Rightarrow$ ✓ قيمة `arr[1][1]`