**Pointers in C**

* Pointers are variable that stores the address of another variable.
* Unlike other variables that hold values of a certain type, pointer holds the address of a variable.
* For example, an integer variable holds (or you can say stores) an integer value, however an integer pointer holds the address of a integer variable.
* ***A simple example to understand how to access the address of a variable without pointers?***
* 

Address of variable a

Value of variable a

Variable Name

0x7ffc65ce089c

a

10

* ***C Pointers – Operators that are used with Pointers***
	+ ***“Address of”(&) Operator***
		- I have used ***&a*** to access the address of variable ***a***. The & operator is also known as ***“Address of”*** Operator.
		- printf("Address of var is: %p", &a);
		- Point to note: %p is a format specifier which is used for displaying the address in hex format.
	+ ***“Value at Address”(\*) Operator***
		- The \* Operator is also known as Value at address operator.
	+ ***How to declare a pointer?***
* int \*p1 /\*Pointer to an integer variable\*/
* double \*p2 /\*Pointer to a variable of data type double\*/
* char \*p3 /\*Pointer to a character variable\*/
* float \*p4 /\*pointer to a float variable\*/
	+ - By using \* operator we can access the value of a variable through a pointer.
		- For example:

double a = 10;

double \*p;

p = &a;

* + - \*p would give us the value of the variable a. The following statement would display 10 as output.

printf("%d", \*p);

* + - Similarly if we assign a value to \*pointer like this:

\*p = 200;

* + - It would change the value of variable a. The statement above will change the value of a from 10 to 200***.***
* ***Example of Pointer demonstrating the use of & and \****

***How to***

* ***declare a Pointer to Pointer (Double Pointer) in C?***
* int \*\*pr;
* Here pr is a double pointer. There must be two \*’s in the declaration of double pointer.



