→ Examples of pointers:

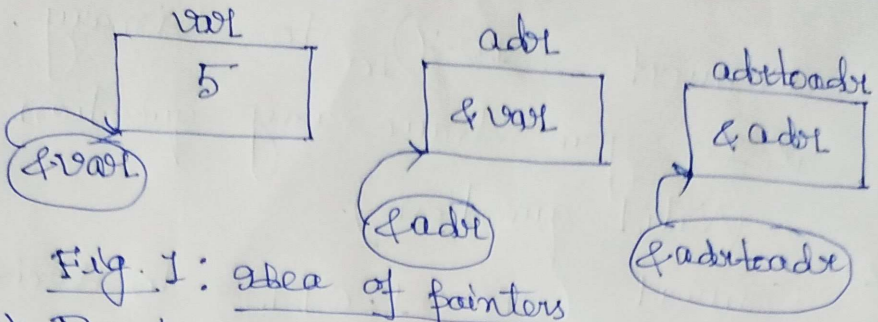

Fig. 1: idea of pointers

→ Pointers and arrays:-

Let us consider the following array —

int a[5]; // An array that can hold maximum 5 integers

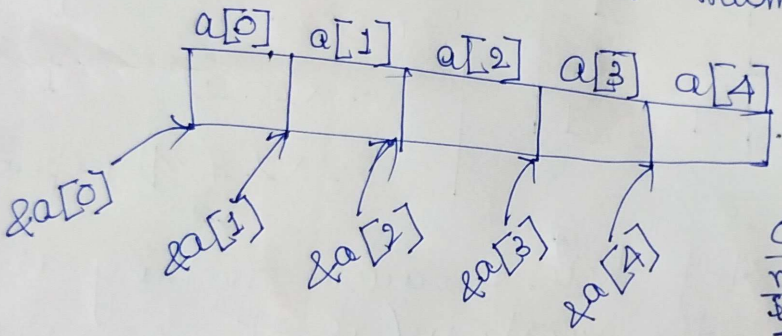

Fig. 2: contiguous memory allocation in case of array.

&a[0] is called the base address of the array. Instead of &a[0] we can use just a to indicate the base address of the array. Let us assume that size of integer in some compiler is 4. Then if &a[0] (or just a) is 1012 (for example) the value of &a[1] will be (1012+4)=1016. Similarly, &a[2] will be 1020, and so on.

* In case of Fig. 1 &var, &adr and &adrtoadr do not follow such contiguous memory allocation.