

```
1  #include <stdio.h>
2
3  int main(void)
4  {
5      //variable declarations
6      int num;
7      int *ptr = NULL; //Declaration Method 1 :- '*ptr' is a variable of type 'int'
8
9      //code
10     num = 10;
11
12     printf("\n\n");
13
14     printf(" ***** BEFORE ptr = &num *****\n\n");
15     printf("Value Of 'num'           = %d\n\n", num);
16     printf("Address Of 'num'           = %p\n\n", &num);
17     printf("Value At Address Of 'num' = %d\n\n", *(&num));
18
19     //Assigning address of variable 'num' to pointer variable 'ptr'
20     //'ptr' now contains address of 'num'...hence, 'ptr' is SAME as '&num'
21     ptr = &num;
22
23     printf("\n\n");
24
25     printf(" ***** AFTER ptr = &num *****\n\n");
26     printf("Value Of 'num'           = %d\n\n", num);
27     printf("Address Of 'num'           = %p\n\n", ptr);
28     printf("Value At Address Of 'num' = %d\n\n", *ptr);
29
30     return(0);
31 }
32
```