

```
1 #include <stdio.h>
2
3 int main(void)
4 {
5     //variable declarations
6     int num;
7     int* ptr = NULL; //Declaration Method 2 :- '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
```