

## Tasks

- 1) Write a program to declare an integer, a pointer to that integer and demonstrate the use of pointer to modify the value of the integer.
- 2) Write a program to declare an integer variable, and a pointer to that integer.
- 3) Write a program that takes two pointers and swaps by using pass by reference.

### TASK 1!

<pre>1 #include&lt;stdio.h&gt; 2 int main() { 3     int num = 10; 4     int *p = &amp;num; 5     printf("Initial value of num: %d\n", num); 6     *p = 20; 7     printf("Modified value of num : %d\n", num); 8 9     return 0; 10 }</pre>	<pre>Initial value of num: 10 Modified value of num using pointer: 20  === Code Execution Successful ===</pre>
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### TASK 2!

<pre>#include&lt;stdio.h&gt; int main() {     int n = 5;     int *p = &amp;n;     printf("Value of number: %d\n", n);     printf("pointer of the number is %d\n", &amp;p);      printf("Address of number: %d\n", &amp;n);     printf("Address stored in pointer: %d\n", *p);      return 0; }</pre>	<pre>Value of number: 5 pointer of the number is -713312400 Address of number: -713312388 Address stored in pointer: 0x7ffdd57bb770  === Code Execution Successful ===</pre>
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### TASK3!

```
18     y=temp;
19     int x=5;
20     int y=10;
21     printf("After swapValue : \n");
22     printf("x=%d,b=%d",a,b);
23
24     return 0;
25 }*/
26 #include <stdio.h>
27 int main() {
28     int x = 5;
29     int y = 10;
30     printf("Before swap: \n");
31     printf("x = %d, y = %d\n", x, y);
32     int temp = x;
33     x = y;
34     y = temp;
35     printf("After swap (using temp variable): \n");
36     printf("x = %d, y = %d\n", x, y);
37     int *px = &x;
38     int *py = &y;
39     int temp2 = *px;
40     *px = *py;
41     *py = temp2;
42     printf("After swap (using pointers): \n");
43     printf("x = %d, y = %d\n", x, y);
44     return 0;
45 }
```

Before swap:  
x = 5, y = 10  
After swap (using temp variable):  
x = 10, y = 5  
After swap (using pointers):  
x = 5, y = 10

=== Code Execution Successful ===  
=== Session Ended. Please Run the code again ===