Explanation:

1. Variable Declaration: We declare an integer variable var and initialize it with the value 20.

2. Pointer Declaration: We declare a pointer ptr of type int \* and assign it the memory address of var using the address-of operator &. This means ptr now points to the memory location of var.

3. Printing Initial Values: We print the initial values of var and ptr. The value of var is 20, and the value of ptr is the memory address of var. We also print the value at the memory address pointed to by ptr using the dereference operator \*. This gives us the value of var, which is 20.

4. Modifying Variable Value: We modify the value of var using the pointer ptr. We assign a new value 30 to the memory address pointed to by ptr using the dereference operator \*. This changes the value of var to 30.

5. Printing Modified Values: We print the modified values of var and ptr. The value of var is now 30, and the value of ptr remains the same (the memory address of var). We also print the value at the memory address pointed to by ptr, which is now 30.

