```
/*__________ⓅⓄⒾⓃⓉⒺⓇⓈ__________*/
#include <stdio.h>
int main()
{
   int a=2;
   int b,c,d;
   int *ptr,* ptr0;    //If you give space after dereference operator(*),
   //the variable after space is declared as pointer variable
   ptr=&a;    //address of a stored as the value of ptr
   b=&ptr;    //doesn't show anything cause normal variable can't store address
   ptr0=&ptr;    //stores address of 'ptr' because 'ptr0' is pointer variable
   c=*ptr;    //assigning value of 'a' of which address ptr is stored to 'c'
   d=ptr;    //stores the value of 'ptr' which is address of 'a'
   *ptr=5;    //assigning the value 5 to 'a' through pointer variable ptr
   //if ptr=5 is written ‘ptr’ will become normal variable
   //because it will not be assigning value 5 to 'a', it will be assigning to 'ptr'
   //any further operations will be not as done as pointer variable
   //Program will stop after that
   printf("Value of 'a':%d\n\n",a);
   printf("Address of 'a' using &:%u\n\n",&a);
   printf("Address of 'a' using 'ptr':%u\n\n",ptr);
   printf("Value of 'a' using *ptr:%d\n\n",*ptr);
   printf("Address of 'ptr' using &:%u\n\n",&ptr);
   printf("Address of 'ptr' assigned to 'b' using &ptr:"
   "(doesn't show any value because we can't assign address to the normal variable)\n\n",b);
   printf("The address of 'ptr' (or) The value of 'ptr0':%u\n\n",ptr0);
   printf("Value of 'a' assigned to 'c' through *ptr:%d\n\n",c);
   printf("Value of 'd' is the address of 'a', which is stored in 'ptr variable:%u\n\n",d);
   printf("...........................................................................\n\n");
   return 0;
}
```

Output:

```
Value of 'a':5

Address of 'a' using &:3793227736

Address of 'a' using 'ptr':3793227736

Value of 'a' using *ptr:5

Address of 'ptr' using &:3793227712

Address of 'ptr' assigned to 'b' using &ptr:(doesn't show any value because we can't assign
address to the normal variable)

The address of 'ptr' (or) The value of 'ptr0':3793227712
```

```
Value of 'a' assigned to 'c' through *ptr:2

Value of 'd' is the address of 'a', which is stored in 'ptr variable:3793227736

.............................................................
```