```c
#include <stdio.h>

int print(int val, long int dp, char *note) {
  printf("value = %i,\tp offset = %li,\t%s\n", val, dp, note);
}

int main() {
  int a[] = {0,1};
  int *p = a, *p0 = a, val = *p;
  print(val, p-p0, "initial");
  val = *p++;     print(val, p - p0, "*p++");
  val = *p--;     print(val, p - p0, "*p--");
  val = *++p;     print(val, p - p0, "*++p");
  val = *--p;     print(val, p - p0, "*--p");
  val = ++*p;     print(val, p - p0, "++*p");
  val = --*p;     print(val, p - p0, "--*p");
}
```

The program prints the following to the console:

```
value = 0,  p offset = 0,  initial
value = 0,  p offset = 1,  *p++
value = 1,  p offset = 0,  *p--
value = 1,  p offset = 1,  *++p
value = 0,  p offset = 0,  *--p
value = 1,  p offset = 0,  ++*p
value = 0,  p offset = 0,  --*p
```

Note that p is unchanged in the last two lines of the output because the dereferencing operates first.