```
1: // $Id: undefvar.c,v 1.8 2013-04-23 18:38:50-07 - - $
 2:
 3: //
 4: // Illustrate the use of uninitialized variables.
 5: // See output from valgrind.
 6: //
 7:
 8: #include <stdio.h>
 9:
10: int main (int argc, char **argv) {
11:
       printf ("argc=%d, argv=%p, *argv=%p(%s)\n",
12:
               argc, argv, *argv, *argv);
13:
       int var;
14:
       int it;
15:
       int *p;
16:
       if (var > 0) it = 3;
17:
       printf ("var=%d, it=%d, p=%p\n", var, it, p);
18:
       *p = 8;
19: }
20:
21: //TEST// valgrind --track-origins=yes undefvar >undefvar.out 2>&1
22: //TEST// echo EXIT STATUS = $? >>undefvar.out
23: //TEST// mkpspdf undefvar.ps undefvar.c* undefvar.out*
24:
```

```
1: @@@@@@@@@@@@@@@@@@@@@@@@@@@@@@ mkc: starting undefvar.c
    2: undefvar.c:
            $Id: undefvar.c, v 1.8 2013-04-23 18:38:50-07 - - $
    4: gcc -g -00 -Wall -Wextra -rdynamic -std=gnul1 undefvar.c
               -o undefvar -lqlut -lGLU -lGL -lX11 -lrt -lm
    6: undefvar.c: In function 'main':
    7: undefvar.c:16:7: warning: 'var' is used uninitialized in this function [
-Wuninitialized]
    8:
           if (var > 0) it = 3;
    9:
   10: undefvar.c:17:4: warning: 'p' is used uninitialized in this function [-W
uninitialized]
           printf ("var=%d, it=%d, p=%p\n", var, it, p);
   11:
   12:
   13: rm -f undefvar.o
   14: @@@@@@@@@@@@@@@@@@@@@@@@@@@@ mkc: finished undefvar.c
```

```
1: ==10688== Memcheck, a memory error detector
    2: ==10688== Copyright (C) 2002-2013, and GNU GPL'd, by Julian Seward et al
    3: ==10688== Using Valgrind-3.10.1 and LibVEX; rerun with -h for copyright
info
    4: ==10688== Command: undefvar
    5: ==10688==
    6: ==10688== Conditional jump or move depends on uninitialised value(s)
                    at 0x400822: main (undefvar.c:16)
    7: ==10688==
    8: ==10688== Uninitialised value was created by a stack allocation
    9: ==10688==
                    at 0x4007E6: main (undefvar.c:10)
   10: ==10688==
   11: ==10688== Conditional jump or move depends on uninitialised value(s)
                    at 0x5E26E12: vfprintf (in /usr/lib64/libc-2.17.so)
   12: ==10688==
   13: ==10688==
                    by 0x5E30C98: printf (in /usr/lib64/libc-2.17.so)
   14: ==10688==
                    by 0x400845: main (undefvar.c:17)
   15: ==10688== Uninitialised value was created by a stack allocation
   16: ==10688==
                    at 0x4007E6: main (undefvar.c:10)
   17: ==10688==
   18: ==10688== Use of uninitialised value of size 8
                    at 0x5E262AB: _itoa_word (in /usr/lib64/libc-2.17.so)
   19: ==10688==
   20: ==10688==
                    by 0x5E27325: vfprintf (in /usr/lib64/libc-2.17.so)
   21: ==10688==
                    by 0x5E30C98: printf (in /usr/lib64/libc-2.17.so)
   22: ==10688==
                    by 0x400845: main (undefvar.c:17)
   23: ==10688== Uninitialised value was created by a stack allocation
   24: ==10688==
                    at 0x4007E6: main (undefvar.c:10)
   25: ==10688==
   26: ==10688== Conditional jump or move depends on uninitialised value(s)
   27: ==10688==
                    at 0x5E262B5: _itoa_word (in /usr/lib64/libc-2.17.so)
   28: ==10688==
                    by 0x5E27325: vfprintf (in /usr/lib64/libc-2.17.so)
   29: ==10688==
                    by 0x5E30C98: printf (in /usr/lib64/libc-2.17.so)
   30: ==10688==
                    by 0x400845: main (undefvar.c:17)
   31: ==10688== Uninitialised value was created by a stack allocation
   32: ==10688==
                    at 0x4007E6: main (undefvar.c:10)
   33: ==10688==
   34: ==10688== Conditional jump or move depends on uninitialised value(s)
   35: ==10688==
                    at 0x5E27374: vfprintf (in /usr/lib64/libc-2.17.so)
   36: ==10688==
                    by 0x5E30C98: printf (in /usr/lib64/libc-2.17.so)
   37: ==10688==
                    by 0x400845: main (undefvar.c:17)
   38: ==10688== Uninitialised value was created by a stack allocation
   39: ==10688==
                    at 0x4007E6: main (undefvar.c:10)
   40: ==10688==
   41: ==10688== Conditional jump or move depends on uninitialised value(s)
                    at 0x5E26EDD: vfprintf (in /usr/lib64/libc-2.17.so)
   42: ==10688==
   43: ==10688==
                    by 0x5E30C98: printf (in /usr/lib64/libc-2.17.so)
   44: ==10688==
                    by 0x400845: main (undefvar.c:17)
   45: ==10688== Uninitialised value was created by a stack allocation
   46: ==10688==
                    at 0x4007E6: main (undefvar.c:10)
   47: ==10688==
   48: ==10688== Conditional jump or move depends on uninitialised value(s)
   49: ==10688==
                    at 0x5E26F60: vfprintf (in /usr/lib64/libc-2.17.so)
   50: ==10688==
                    by 0x5E30C98: printf (in /usr/lib64/libc-2.17.so)
   51: ==10688==
                    by 0x400845: main (undefvar.c:17)
   52: ==10688== Uninitialised value was created by a stack allocation
   53: ==10688==
                    at 0x4007E6: main (undefvar.c:10)
   54: ==10688==
   55: ==10688== Conditional jump or move depends on uninitialised value(s)
                    at 0x5E29726: vfprintf (in /usr/lib64/libc-2.17.so)
   56: ==10688==
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57: ==10688==
                 by 0x5E30C98: printf (in /usr/lib64/libc-2.17.so)
58: ==10688==
                 by 0x400845: main (undefvar.c:17)
              Uninitialised value was created by a stack allocation
59: ==10688==
60: ==10688==
                 at 0x4007E6: main (undefvar.c:10)
61: ==10688==
62: ==10688== Use of uninitialised value of size 8
63: ==10688==
                 at 0x5E26251: _itoa_word (in /usr/lib64/libc-2.17.so)
64: ==10688==
                 by 0x5E27325: vfprintf (in /usr/lib64/libc-2.17.so)
65: ==10688==
                 by 0x5E30C98: printf (in /usr/lib64/libc-2.17.so)
                 by 0x400845: main (undefvar.c:17)
66: ==10688==
67: ==10688== Uninitialised value was created by a stack allocation
68: ==10688==
                 at 0x4007E6: main (undefvar.c:10)
69: ==10688==
70: ==10688== Conditional jump or move depends on uninitialised value(s)
71: ==10688==
                 at 0x5E26258: _itoa_word (in /usr/lib64/libc-2.17.so)
72: ==10688==
                 by 0x5E27325: vfprintf (in /usr/lib64/libc-2.17.so)
73: ==10688==
                 by 0x5E30C98: printf (in /usr/lib64/libc-2.17.so)
74: ==10688==
                 by 0x400845: main (undefvar.c:17)
75: ==10688== Uninitialised value was created by a stack allocation
76: ==10688==
                 at 0x4007E6: main (undefvar.c:10)
77: ==10688==
78: ==10688== Use of uninitialised value of size 8
79: ==10688==
                 at 0x40084A: main (undefvar.c:18)
80: ==10688== Uninitialised value was created by a stack allocation
81: ==10688==
                 at 0x4007E6: main (undefvar.c:10)
82: ==10688==
83: argc=1, argv=0xffefff618, *argv=0xffefffa4f(undefvar)
84: var=0, it=0, p=0xffefff610
85: ==10688==
86: ==10688== HEAP SUMMARY:
87: ==10688==
                  in use at exit: 0 bytes in 0 blocks
                total heap usage: 1 allocs, 1 frees, 16 bytes allocated
88: ==10688==
89: ==10688==
90: ==10688== All heap blocks were freed -- no leaks are possible
91: ==10688==
92: ==10688== For counts of detected and suppressed errors, rerun with: -v
93: ==10688== ERROR SUMMARY: 36 errors from 11 contexts (suppressed: 1 from
94: EXIT STATUS = 0
```