

```
1: // $Id: sizeofsizes.c,v 1.12 2012-02-09 19:00:37-08 - - $
2:
3: #include <assert.h>
4: #include <inttypes.h>
5: #include <stdio.h>
6: #include <stdlib.h>
7:
8: #define PRINTSIZE(TYPE) \
9:     printf ("%4ld = sizeof (%s)\n", sizeof (TYPE), #TYPE);
10:
11: struct node {
12:     char *string;
13:     struct node *link;
14: };
15:
16: int main (int argc, char **argv) {
17:     printf ("argc = %d, argv = %p\n", argc, argv);
18:     printf ("argv[0] = %p = \"%s\"\n", argv[0], argv[0]);
19:     PRINTSIZE (char);
20:     PRINTSIZE (short);
21:     PRINTSIZE (int);
22:     PRINTSIZE (long);
23:     PRINTSIZE (long long);
24:     PRINTSIZE (float);
25:     PRINTSIZE (double);
26:     PRINTSIZE (long double);
27:     PRINTSIZE (void *);
28:     PRINTSIZE (struct node);
29:     PRINTSIZE (struct node *);
30:     PRINTSIZE (size_t);
31:     PRINTSIZE (uintptr_t);
32:     return EXIT_SUCCESS;
33: }
34:
35: //TEST// ./sizeofsizes >sizeofsizes.lis
36: //TEST// mkpspdf sizeofsizes.ps sizeofsizes.c* sizeofsizes.lis
37:
```

```
1: @@@@ mkc: starting sizeofsizes.c
2: sizeofsizes.c: $Id: sizeofsizes.c,v 1.12 2012-02-09 19:00:37-08 - - $
3: gcc -g -O0 -Wall -Wextra -std=gnu99 sizeofsizes.c -o sizeofsizes -lm
4: lint -Xa -fd -m -u -x -errchk=%all sizeofsizes.c
5:
6: function returns value which is always ignored
7:     printf
8: rm -f sizeofsizes.o
9: @@@@ mkc: finished sizeofsizes.c
```

```
1: argc = 1, argv = 0x7fff64640e98
2: argv[0] = 0x7fff64642268 = "./sizeofsizes"
3: 1 = sizeof (char)
4: 2 = sizeof (short)
5: 4 = sizeof (int)
6: 8 = sizeof (long)
7: 8 = sizeof (long long)
8: 4 = sizeof (float)
9: 8 = sizeof (double)
10: 16 = sizeof (long double)
11: 8 = sizeof (void *)
12: 16 = sizeof (struct node)
13: 8 = sizeof (struct node *)
14: 8 = sizeof (size_t)
15: 8 = sizeof (uintptr_t)
```