```
1: // $Id: sizeofsizes.c,v 1.12 2012-02-09 19:00:37-08 - - $
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);
      printf ("argv[0] = p = \"\s\"\n", argv[0], argv[0]);
18:
19:
      PRINTSIZE (char);
      PRINTSIZE (short);
20:
21:
      PRINTSIZE (int);
22:
      PRINTSIZE (long);
23:
    PRINTSIZE (long long);
24:
    PRINTSIZE (float);
25:
    PRINTSIZE (double);
    PRINTSIZE (long double);
26:
27:
     PRINTSIZE (void *);
28:
     PRINTSIZE (struct node);
29:
     PRINTSIZE (struct node *);
30:
     PRINTSIZE (size_t);
     PRINTSIZE (uintptr_t);
31:
      return EXIT_SUCCESS;
32:
33: }
34:
35: //TEST// ./sizeofsizes >sizeofsizes.lis
36: //TEST// mkpspdf sizeofsizes.ps sizeofsizes.c* sizeofsizes.lis
37:
```

\$cmps012b-wm/Labs-cmps012m/lab6c-malloc-free/misc/sizeofsizes.c.log

11/08/12 18:38:10

- 2: sizeofsizes.c: \$Id: sizeofsizes.c,v 1.12 2012-02-09 19:00:37-08 - \$
- 3: gcc -g -00 -Wall -Wextra -std=gnu99 sizeofsizes.c -o sizeofsizes -lm
- 4: rm -f sizeofsizes.o
- 5: @@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@ mkc: finished sizeofsizes.c

```
1: argc = 1, argv = 0x7fff69d802d8
2: argv[0] = 0x7fff69d821d6 = "./sizeofsizes"
     1 = sizeof (char)
4:
      2 = sizeof (short)
5:
     4 = sizeof (int)
     8 = sizeof (long)
 6:
     8 = sizeof (long long)
7:
     4 = sizeof (float)
8:
     8 = sizeof (double)
9:
10:
    16 = sizeof (long double)
11:
     8 = sizeof (void *)
    16 = sizeof (struct node)
12:
13:
   8 = sizeof (struct node *)
14: 8 = sizeof (size_t)
15: 8 = sizeof (uintptr_t)
```