```
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);
20:
      PRINTSIZE (short);
21:
      PRINTSIZE (int);
22:
      PRINTSIZE (long);
23:
      PRINTSIZE (long long);
24:
      PRINTSIZE (float);
      PRINTSIZE (double);
25:
26:
      PRINTSIZE (long double);
27:
      PRINTSIZE (void *);
28:
      PRINTSIZE (struct node);
29:
      PRINTSIZE (struct node *);
30:
      PRINTSIZE (size_t);
31:
      PRINTSIZE (uintptr_t);
       return EXIT_SUCCESS;
32:
33: }
34:
35: //TEST// ./sizeofsizes >sizeofsizes.lis
36: //TEST// mkpspdf sizeofsizes.ps sizeofsizes.c* sizeofsizes.lis
37:
```

01/28/16 16:02:07

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

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```
1: argc = 1, argv = 0x7ffe89e1fbc8
 2: argv[0] = 0x7ffe89e20b23 = "./sizeofsizes"
       1 = sizeof (char)
       2 = sizeof (short)
 4:
       4 = sizeof (int)
 5:
       8 = sizeof (long)
 6:
       8 = sizeof (long long)
 7:
 8:
       4 = sizeof (float)
 9:
      8 = sizeof (double)
     16 = sizeof (long double)
10:
     8 = sizeof (void *)
11:
12:
     16 = sizeof (struct node)
13:
      8 = sizeof (struct node *)
     8 = sizeof (size_t)
14:
15:
      8 = sizeof (uintptr_t)
```