

IfDefs

IfDefs1.c

```
01 #include <stdio.h>
02
03 #define DIM 10
04 #define INIT
05
06 int main() {
07     int vals[DIM], i, val;
08
09     scanf("%d", &val);
10 #ifdef DEBUG
11     printf("Entered value: %d\n", val);
12 #endif
13 #ifdef INIT
14     for (i = 0; i < DIM; i++)
15         vals[i] = val;
16 #endif
17 }
18
19 /* Sample compiles:
20 gcc -E IfDef1.c
21
22 int printf (const char *, ...);
23 int scanf (const char *, ...);
24 // Plus around another 1000 lines
25
26 int main() {
27     int vals[10], val;
28
29     scanf("%d", &val);
30     for (i = 0; i < DIM; i++)
31         vals[i] = val;
32 }
33
34 gcc -E -DDEBUG
35 int printf (const char *, ...);
36 int scanf (const char *, ...);
37 // Plus around another 1000 lines
38
39 int main() {
40     int vals[10], val;
41
42     scanf("%d", &val);
43     printf("Entered value: %d\n", val);
44     for (i = 0; i < DIM; i++)
45         vals[i] = val;
46 } */
```

```
#if defined(DEBUG)
    printf("Entered value: %d\n", val);
#endif
```

```
#if defined(V5) && !defined(UNIX)
    block
#endif
```

```
const int version = 2;
#if version == 2
    printf("Version 2!\n");
#endif
```

IfDefs2.c

```
01 // First include
02 #include "IfDefs2.h"
03
04 // Second include, Usually happens by indirect inclusion
05 #include "IfDefs2.h"
06
07 int main() {}
08
09 /* This expands to
10 // First include
11 #ifndef IFDEFS2_H
12 #define IFDEFS2_H
13 typedef unsigned short ushort;
14 #endif
15
16 // Second include
17 #ifndef IFDEFS2_H
18 #define IFDEFS2_H
19 typedef unsigned short ushort;
20 #endif
21
22 int main() {}
23
24 So, what you get is just:
25 #define IFDEFS2_H
26 typedef unsigned short ushort;
27
28 int main() {}
29 */
```

IfDefs2.h

```
01 #ifndef IFDEFS2_H
02 #define IFDEFS2_H
03 typedef unsigned short ushort;
04 #endif
```