

CS 1723, C Preprocessor, Mon Mar 23 1998, Page 1 of 1

```
runner% cat prepro.c
#define MIN(x, y) (((x) < (y)) ? (x) : (y))
#define MIN4(a, b, c, d) MIN(MIN(a, b), MIN(c, d))
#define BETA 0.292893218813452476
#define f(x) ((x) < -BETA) ? (-2.0*((x)+1.0)*((x)+1.0)) \
: (((x) <= 0) ? (-2.0*(x)*((x)+2.0)) \
: (((x) < BETA) ? (2.0*(x)*(2.0-(x))) \
: (-2.0*(1.0-(x))*(1.0-(x)))))
/*#define DEBUG */

void main()
{
    int u = 1, v = 2, r = 3, s = 4, t = 5;
    double y = 1.0, z;
    u = MIN(u, v);
    v = MIN4(r, s, t, u);
    z = f(y);
#endif DEBUG
    printf("%f\n", z);
    printf("%i, %i\n", u, v);
#else
    printf("No debuggin\n");
#endif
}
runner% cc -E prepro.c > prepro.out
runner% cat prepro.out
# 8 "prepro.c"

void main()
{
    int u = 1, v = 2, r = 3, s = 4, t = 5;
    double y = 1.0, z;
    u = ( ( ( u ) < ( v ) ) ? ( u ) : ( v ) );
    v = ( ( ( ( ( r ) < ( s ) ) ? ( r ) : ( s ) ) ) < ( ( ( ( t ) <
        ( u ) ) ? ( t ) : ( u ) ) ) ) ? ( ( ( ( r ) < ( s ) ) ? ( r ) :
        ( s ) ) ) : ( ( ( ( t ) < ( u ) ) ? ( t ) : ( u ) ) );
    z = ( ( Y ) < - 0.292893218813452476 ) ? ( - 2.0 * ( ( y ) + 1.0 ) *
        ( ( y ) + 1.0 ) ) : ( ( ( y ) <= 0 ) ? ( - 2.0 * ( y ) *
        ( ( y ) + 2.0 ) ) : ( ( ( y ) < 0.292893218813452476 ) ?
        ( 2.0 * ( y ) * ( 2.0 - ( y ) ) ) : ( - 2.0 * ( 1.0 - ( y ) ) *
        ( 1.0 - ( y ) ) ) );
    # 20
    printf("No debuggin\n");
    # 22
}
#ident "acomp: (CDS) SPARCompilers 2.0.1 03 Sep 1992"
runner% cc -o prepro prepro.c
runner% prepro
No debuggin
runner% prepro2      (Removes comment from around /*#define DEBUG */)
-0.000000
1, 1
```