

```

runner$ cat -n example0.c
 1 /* Volume of a sphere of radius r */
 2 #include <stdio.h>
 3 #define pi 3.14159265358979;
 4 int main()
 5 {
 6     double r, vol;
 7     /* input the radius r */
 8     scanf("%lf", r);
 9     /* calculate the volume */
10     vol = (4/3)*pi*r*r*r;
11     /* print radius and volume */
12     printf("Radius:%10.6f, Volume:%10.6f\n", r, vol);
13     return 0;
14 }
runner$ lint -m -u example0.c
(8) warning: variable may be used before set: r
(10) error: cannot dereference non-pointer type

statement has null effect
(10)
lint: errors in example0.c; no output created
lint: pass2 not run - errors in example0.c
runner$ cat -n example1.c
 1 /* Volume of a sphere of radius r */
 2 #include <stdio.h>
 3 #define pi 3.14159265358979
 4 int main()
 5 {
 6     double r, vol;
 7     /* input the radius r */
 8     scanf("%lf", &r);
 9     /* calculate the volume */
10     vol = (4/3)*pi*r*r*r;
11     /* print radius and volume */
12     printf("Radius:%10.6f, Volume:%10.6f\n", r, vol);
13     return 0;
14 }
runner$ lint -m -u example1.c
function returns value which is always ignored
printf scanf
runner$ cc -o example1 example1.c
runner$ example1
1.0
Radius: 1.000000, Volume: 3.141593 (NOTE: WRONG ANSWER!)
runner$ cat example2.c
/* Volume of a sphere of radius r */
#include <stdio.h>
#define pi 3.14159265358979

int main()
{
    double r, vol;
    /* input the radius r */
    scanf("%lf", &r);
    /* calculate the volume */
    vol = (4.0/3.0)*pi*r*r*r;
    /* print radius and volume */
    printf("Radius:%10.6f, Volume:%10.6f\n", r, vol);
    return 0;
}
runner$ example2
1.0
Radius: 1.000000, Volume: 4.188790
runner$ example2
10.0
Radius: 10.000000, Volume:4188.790205

```