

```
1 #include <stdint.h>
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14 float Q_rsqrt(float number)
15 {
16     long i;
17     float x2, y;
18     const float threehalfs = 1.5F;
19
20     x2 = number * 0.5F;
21     y = number;
22     i = *(long *)&y; // evil floating point bit level hacking
23     i = 0x5f3759df - (i >> 1); // what???
24     y = *(float *)&i;
25     y = y * (threehalfs - (x2 * y * y)); // 1st iteration
26     // y = y * ( threehalfs - ( x2 * y * y ) ); // 2nd iteration, this can be removed
27
28     return y;
29 }
```



<http://coding.hsnr.de>

Coding@ HSNR

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