# 6.23

平均旋转时间：T avg rotation = 1/2\*T max rotation = 1/2\*(60s/15000RPM)\*1000ms/s≈2ms

平均传送时间：T avg transfer = 1/RPM \* (1/(平均扇区数/磁道))\*60s/1min = 1/15000RPM \* （1/800）\*1000ms/s≈0.00008ms

总的预计访问时间：T access = Tave seek + T avg rotation + T avg transfer≈6ms

# 6.27

## A：

当标记位为45时，

C0 = 00, 01, 10, 11（分别对应字节0~3）

CI = 001

CT = 01000101

故有 0x08A4, 0x08A5, 0x08A6, 0x08A7。

同理可得：当标记位为38时，

CO = 00, 01, 10, 11

CI = 001

CT = 00111000

故有答案 0x0704, 0x0705, 0x0706, 0x0707

## B:

组6中命中的只有标记位为91，故

C0 = 00, 01, 10, 11

CI = 110

CT = 10010001

可得结果： 0x1238， 0x1239， 0x123A， 0x123B

# 6.31

## A：

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 12 | 11 | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 |
| 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 |

## B：

|  |  |
| --- | --- |
| 参数 | 值 |
| 高速缓存块偏移 | 0x2 |
| 高速缓存组索引 | 0x6 |
| 高速缓存标记 | 0x38 |
| 高速缓存是否命中 | 否 |
| 返回的高速缓存字节 | - |

# 6.35

## dst数组

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 列0 | 列1 | 列2 | 列3 |
| 行0 | m | h | h | h |
| 行1 | m | h | h | h |
| 行2 | m | h | h | h |
| 行3 | M | H | H | h |

## src数组

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 列0 | 列1 | 列2 | 列3 |
| 行0 | m | h | h | h |
| 行1 | m | h | h | h |
| 行2 | m | h | h | h |
| 行3 | M | H | H | h |

# 6.39

## A:

16 \* 16 \* 4 = 1024

## B:

1024 / 8 = 128

## C:

128 / 1024 = 12.5%

# 6.43

100 %

# 7.7

将定义double x;移入f()里。

# 7.11

因为未初始化的全局变量在目标文件中是没有分配存储空间，而在加载之后，会需要一些空间；所以这些空间可能是为.bss中的符号准备的。