

Cache Example

0	00000	A
1	00001	B
2	00010	C
3	00011	D
4	00100	E
5	00101	F
6	00110	G
7	00111	H
8	01000	I
9	01001	J
10	01010	K
11	01011	L
12	01100	M
13	01101	N
14	01110	O
15	01111	P
16	10000	Q
17	10001	R
18	10010	S
19	10011	T
20	10100	U
21	10101	V
22	10110	W
23	10111	X
24	11000	Y
25	11001	Z
26	11010	a
27	11011	b
28	11100	c
29	11101	d
30	11110	e
31	11111	f

arr1[0]
1
2
3
4
5
6
7
arr2[0]
1
2
3
4
5
6
7

16 misses
100% miss rate

16 misses
100% miss rate

8 misses
8 hits
50% miss rate

	0	1
00	X Q X Q	X R Y R
01	K S K S	K T K T
10	E M E M	F N F N
11	G O G O	H P H P

00 01 10 11

	00	01	10	11
0	(similar pattern) Q	R	S	T
1	E M E M E M E M	F N F N F N F N	G O G O G O G O	H P H P H P H P

0 1 0 1

0	E I	F J	M Q	X R
1	G K	H L	S T	

```
char arr1[8]; // &arr1[0] = 4
char arr2[8] // &arr2[0] = 12

// Example 2
for (int i = 0; i < 8; i++){
    printf("arr1[%d] is %c\n", i, arr1[i]);
    printf("arr2[%d] is %c\n", i, arr2[i]);
}
```