

In The Name of God

Computer Architecture Homework 2

Parham Alvani

February 24, 2015

powered by L^AT_EX

Contents

1 Problem 2

| | |
|------|----------|
| 0 → | 00000000 |
| 21 → | 00010101 |
| 23 → | 00010111 |
| 35 → | 00100011 |
| 76 → | 01001100 |
| 1 → | 00000001 |
| 66 → | 01000010 |
| 80 → | 01010000 |
| 54 → | 00110110 |
| 36 → | 00100100 |
| 24 → | 00011000 |
| 23 → | 00010111 |
| 75 → | 01001011 |
| 2 → | 00000010 |

| address | #1 | #2 | #3 |
|---------|------|-----|-----|
| 0 | miss | hit | hit |
| 21 | miss | hit | hit |
| 23 | hit | hit | hit |
| 35 | miss | hit | hit |
| 76 | miss | hit | hit |
| 1 | hit | hit | hit |
| 66 | hit | hit | hit |
| 80 | miss | hit | hit |
| 54 | miss | hit | hit |
| 36 | hit | hit | hit |
| 24 | hit | hit | hit |
| 23 | hit | hit | hit |
| 75 | hit | hit | hit |
| 2 | hit | hit | hit |

$$\begin{aligned}\text{miss rate} &= \\ &= \frac{7}{14 * 3} = \frac{1}{6}\end{aligned}$$