NOTES ON TURING MACHINES

ERIC MARTIN

1. Division by 2 program

```
del1 1 del2 0 R
del2 1 mov1R 0 R
mov1R 1 mov1R 1 R
mov1R 0 mov2R 0 R
mov2R 1 mov2R 1 R
mov2R 0 mov1L 1 L
mov1L 1 mov1L 1 L
mov1L 0 mov2L 0 L
mov2L 1 mov2L 1 L
mov2L 0 del1 0 R
```
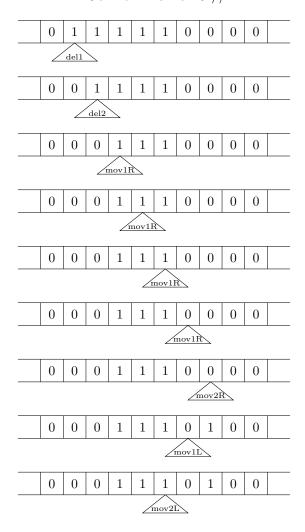
2. Computation of 5 // 2

| 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | |

del1

| 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | |

del2

| 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | |

mov1R

| 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | |

mov1R

| 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | |

mov1R

| 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | |

mov1R

| 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | |

mov2R

| 0 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | |

mov1L

| 0 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | |

mov2L

| 0 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 0 |

mov2L

| 0 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 0 |

mov2L

| 0 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 0 |

mov2L

| 0 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 0 |

del1

| 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 |

del2

| 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 |

mov1R

| 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 |

mov1R

| 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 |

mov2R

| 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 |

mov2R

| 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 |

mov1L

| 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 |

mov1L

| 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 |

mov2L

| 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 |

mov2L

| 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 |

del1

| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 |

del2