

1) Output if page is in memory:

Reference 46. Logical address 22  
Logical Page 0, Offset 22  
Logical Page 0 is in memory and mapped to Physical Page 19  
Final address is Physical page: 19 Offset: 22  
The Value at that address is 22

2) Output if page not in memory but there is a free frame:

Reference 47. Logical address 15065  
Logical Page 58, Offset 217  
Page Not Mapped. Page Fault number 42.  
Found Frame 41 in memory  
Logical Page 58 Now Mapped to Physical Page 41  
Final address is Physical page: 41 Offset: 217  
The Value at that address is 217

3) Output if there is a page fault and no free page frame

Reference 222 Logical address 34022  
Logical Page 132, Offset 230  
Page Not Mapped. Page Fault number 172.  
No Free Page Frame. Invoking LRU Page Replacement Algorithm<sup>1</sup>  
Victim physical page is 48  
LP 153 is currently mapped to victim page frame  
Logical Page 132 Now Mapped to Physical Page 48  
Final address is Physical page: 48 Offset: 230  
The Value at that address is 230

Final Output:

196 Total Page Faults

Logical Page 0 Mapped to Physical Page 60  
Logical Page 1 not Mapped  
Logical Page 2 not Mapped  
Logical Page 3 not Mapped  
Logical Page 4 not Mapped  
Logical Page 5 not Mapped  
Logical Page 6 Mapped to Physical Page 15  
Logical Page 7 not Mapped

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<sup>1</sup> Assuming you are using LRU