

Question 1

Given the following page table, with 512-byte pages:

<i>Proc</i>	<i>Page</i>	<i>Frame</i>
<i>P1</i>	0	390
	1	Invalid (Disk)
	2	129
<i>P2</i>	0	732
	1	128
	2	693
	3	Invalid (Error)
<i>P3</i>	0	Invalid (Disk)
	1	932
	2	389
	10	237
	11	Invalid (Error)

Resolve the following address references for the following processes:

- **P1: 61, 562, 570, 794, 821, 884, 1412, 1521**
- **P2: 26, 84, 146, 356, 647, 779, 831, 1184, 1350, 1471, 1713, 1962**
- **P3: 61, 129, 256, 686, 1070, 1221, 1233, 1470, 5220, 5389, 5487, 5951**

Hint: Remember to compute the starting location of each page first.

Question 2

Consider the following string of memory references:

7, 2, 3, 1, 2, 5, 3, 4, 6, 7, 7, 1, 0, 5, 4, 6, 2, 3, 0, 1, 3, 7, 7, 7, 7, 1, 0, 3, 2, 5, 4, 1, 8, 2, 6

Draw the chart of memory references and page faults for Optimal, FIFO and LRU replacement, with 3, 4 and 5 frames.