Program 3: Test Cases

Files representing these test cases may be found here:
https://drive.google.com/drive/folders/1hEIPOf0dBNcYvl0IMECeLL_xIW4r56zV?usp=sharing

FIFO1: Basic
10 Frames

frame/ page	66	244	117	209	156	112	95	189	253	71
0	66									
1		244								
2			117							
3				209						
4					156					
5						112				
6							95			
7								189		
8									253	
9										71

10 requests, 10 faults, 10 misses, 0 hits

FIFO2: Evictions
5 Frames

frame/ page	66	244	117	209	156	112	95	189	253	71
0	66					112				
1		244					95			
2			117					189		
3				209					253	
4					156					71

10 requests, 10 faults, 10 misses, 0 hits
FIFO3: Hits
5 Frames

frame/page	66	244	117	209	156	244	117	209	156	66
0	66									
1		244								
2			117							
3				209						
4					156					

10 requests, 5 faults, 5 misses, 5 hits

FIFO4: Hits & Faults

5 Frames

frame/page	66	244	117	209	156	112	117	209	253	66
0	66					112				
1		244							253	
2			117				Hit			66
3				209				Hit		
4					156					

10 requests, 8 faults, 8 misses, 2 hits

FIFO5: TLB
8 Frames
5 TLB entries[1]

frame/page	66	244	117	209	156	112	95	189	253	71	209	112	189	66
0	66								253					
1		244								71				
2			117											66
3				209							SM			
4					156									
5						112						SM		
6							95							
7								189					Hit	

14 requests, 11 faults, 1 TLB hit, 13 TLB misses
SM = Soft Miss

LRU1: Evictions
5 Frames

frame/page	66	244	117	209	156	112	95	189	253	71
0	66					112				
1		244					95			
2			117					189		
3				209					253	
4					156					71

10 requests, 10 faults, 10 misses, 0 hits

---

[1] You do not have to support a variable number of TLB entries. I made them 5 here to keep the table small.

LRU2: Hits

5 Frames

frame/page	66	244	117	209	156	112	117	209	253	66
0	66					112				
1		244							253	
2			117				Hit			
3				209				Hit		
4					156					66

10 requests, 8 faults, 8 misses, 2 hits

LRU3: LRU vs. FIFO ordering

3 Frames

frame/page	66	244	117	117	244	66	95	189	253	71
0	66					Hit			253	
1		244			Hit			189		
2			117	Hit			95			71

10 requests, 7 faults, 7 misses, 3 hits

OPT1: Faults

5 Frames

frame/page	66	244	117	209	156	112	95	189	253	71
0	66					112				
1		244					95			
2			117					189		
3				209					253	
4					156					71

10 requests, 10 faults, 10 misses, 0 hits

OPT2: Replacement

5 Frames

frame/page	66	244	117	209	156	112	95	66	253	71
0	66							Hit	253	
1		244				112				
2			117				95			
3				209						
4					156					71

10 requests, 9 faults, 9 misses, 1 hits