

2) Consider page reference string
1, 3, 0, 3, 5, 6, 3 with 3 page
frames. Find no. of page faults,
Hit ratio & miss ratio

→	✓	✓	✓	✓	✓	✓	✓
Pages	1	3	0	3	5	6	3
F_1	1	1	1	1	5	5	5
F_2		3	3	3	3	6	6
F_3			0	0	0	0	3
	X	X	X	✓	X	X	X

Page fault = 6

$$\text{Hit ratio} = \frac{\text{no. of hits}}{\text{Total}} = \frac{1}{6}$$

$$\text{Miss ratio} = \frac{\text{no. of page faults}}{\text{Total}} = \frac{6}{6}$$

3) Frames = 4

Pages	7	0	1	2	0	3	0	4	2	3	0	3	2	3
F1	7	7	7	7	7	3	3	3	3	3	3	3	3	3
F2		0	0	0	0	0	0	4	4	4	4	4	4	4
F3			1	1	1	1	1	1	1	1	0	0	0	0
F4				2	2	2	2	2	2	2	2	2	2	2
	X	X	X	X	✓	X	✓	X	✓	✓	X	✓	✓	✓

Page faults = 7
Page Hit = 7

Pages	3	2	1	3	4	1	6	2	4	3	4	2	1	4	5	2	1	3	4
F ₁	3	3	3	3	4	4	4	4	4	3	3	3	3	3	5	5	5	5	4
F ₂		2	2	2	2	2	6	6	6	6	4	4	4	4	4	2	2	2	2
F ₃			1	1	1	1	1	2	2	2	2	2	1	1	1	1	1	3	3
	X	X	X	✓	X	✓	X	X	✓	X	X	✓	X	✓	X	X	✓	X	X

3 2 1 3 4 1 6 2 4

FILED

No. of page faults = 13

Hit ratio = no. of hits / Total = 6/19

Miss ratio = $\frac{13}{19}$ no. of page fault / Total
= 13/19