Logical memory size – 64 B, physical memory size – 128 B, page size 4 B. In logical memory one after another are four processes: 7 B, 25 B, 5 B and 4B. Turi būti apskaičiuojama ir vykdoma.

Algorithm must display:

a) Number of pages occupied by each process

P1 = 2

P2 = 7

P3 = 2

P4 = 1

b) Create page table

i. Create so, what the processes will be mapped from the beginning of physical memory

Page no.	Frame no.
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12

ii. Create so, what the processes will be mapped from the end of physical memory

Page no.	Frame no.
1	32
2	31
3	30
4	29
5	28
6	27
7	26
8	25
9	24
10	23
11	22
12	21

b) Map pages to physical memory

100 is added to each process number to distinguish where each process begins and ends also where each process byte is located. Physical memory shown from the first to the last byte by 8 byte blocks (you can show physical memory as column or row).

i. Mapped from the beginning in physical memory

101	102	103	104	105	106	107	0
201	202	203	204	205	206	207	208
209	210	211	212	213	214	215	216
217	218	219	220	221	222	223	224
225	0	0	0	301	302	303	304
305	0	0	0	401	402	403	404
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0

ii. Mapped from the end in physical memory

0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
401	402	403	404	305	0	0	0
301	302	303	304	225	0	0	0
221	222	223	224	217	218	219	220
213	214	215	216	209	210	211	212
205	206	207	208	201	202	203	204
105	106	107	0	101	102	103	104

c) List of non occupied frames

i. Mapped from the beginning in physical memory

13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32

ii. Mapped from the end in physical memory

1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20