FIFO:

D

Insertion Order: D

D			

A

Insertion Order: D,A

D	A		

J

Insertion Order: D,A,J

D	A	J	

M

Insertion Order: D,A,J,M

D	A	J	M

A

Insertion Order: D,A,J,M

D	A	J	M

D

Insertion Order: D,A,J,M

D	A	J	M

F

Insertion Order: A,J,M,F

F	A	J	M

G

Insertion Order: J,M,F,G

F	G	J	M

I

Insertion Order: M,F,G,I

F	G	I	M

H

Insertion Order: F,G,I,H

F	G	I	H

I

Insertion Order: F,G,I,H

F	G	I	M

H

Insertion Order: F,G,I,H

F	G	I	H

J

Insertion Order: G,I,H,J

J	G	I	H

L

Insertion Order: I,H,J,L

J	L	I	H

K

Insertion Order: H,J,L,K

J	L	K	H

J

Insertion Order: H,J,L,K

J	L	K	H

Number of Hits: 5

Number of Misses: 11

Additional data: Insertion order (Considering processes may exit)

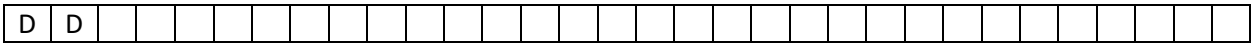
Internal fragmentation in the end: 832 mb

This method of memory management technique causes internal fragmentation. We give 512 mb of memory to each process but some of them require only 64 megabytes which causes up to 448 mbytes of internal fragmentation for a process. This technique is free of external fragmentation.

LRU:

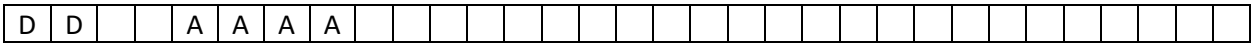
D: 128

Use order: D



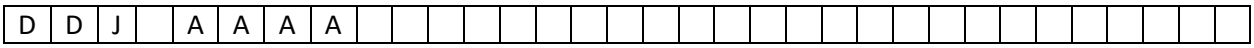
A: 256

Use order: D,A



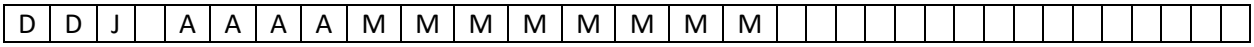
J: 64

Use order: D,A,J



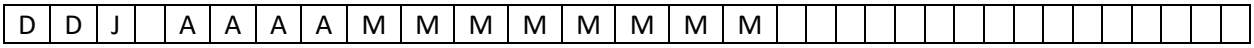
M: 512

Use order: D,A,J,M



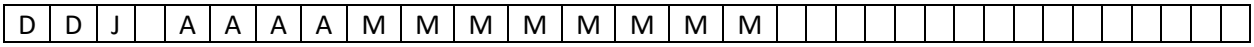
A: 256

Use order: D,J,M,A



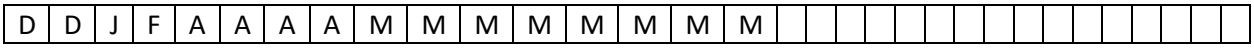
D: 128

Use order: J,M,A,D



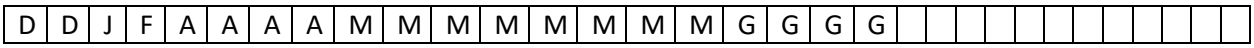
F: 64

Use order: J,M,A,D,F



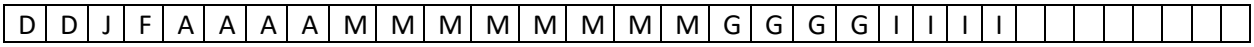
G: 256

Use order: J,M,A,D,F,G



I: 256

Use order: J,M,A,D,F,G,I



H: 512

Use order: J,M,A,D,F,G,I,H

D	D	J	F	A	A	A	A	M	M	M	M	M	M	M	M	G	G	G	G	I	I	I	I	H	H	H	H	H	H	H	H

I: 256

Use order: J,M,A,D,F,G,H,I

D	D	J	F	A	A	A	A	M	M	M	M	M	M	M	M	G	G	G	G	I	I	I	I	H	H	H	H	H	H	H	H

H: 512

Use order: J,M,A,D,F,G,I,H

D	D	J	F	A	A	A	A	M	M	M	M	M	M	M	M	G	G	G	G	I	I	I	I	H	H	H	H	H	H	H	H

J: 64

Use order: M,A,D,F,G,I,H,J

D	D	J	F	A	A	A	A	M	M	M	M	M	M	M	M	G	G	G	G	I	I	I	I	H	H	H	H	H	H	H	H

L: 128

Use order: A,D,F,G,I,H,J,L

D	D	J	F	A	A	A	A	L	L						G	G	G	G	I	I	I	I	H	H	H	H	H	H	H	H

K: 512

Use order: H,J,L,K

		J						L	L						K	K	K	K	K	K	K	K	H	H	H	H	H	H	H	H

J: 64

Use order: H,L,K,J

		J						L	L						K	K	K	K	K	K	K	K	H	H	H	H	H	H	H	H

Number of Hits = 6

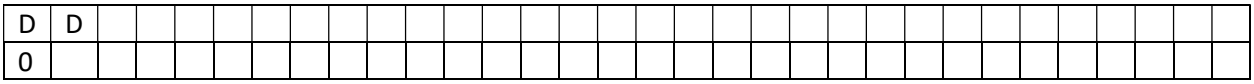
Number of Misses = 10

External fragmentation in the end: 832 mb

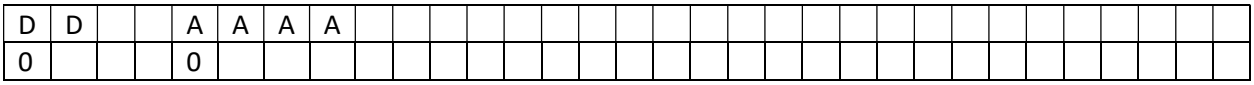
This method causes no integral fragmentation because every process is allocated amount of memory equivalent to what they need. But external fragmentation happens because some processes are too big to fit into smaller slots.

Clock:

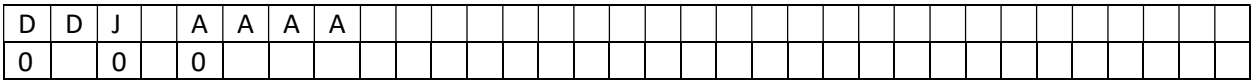
D: 128



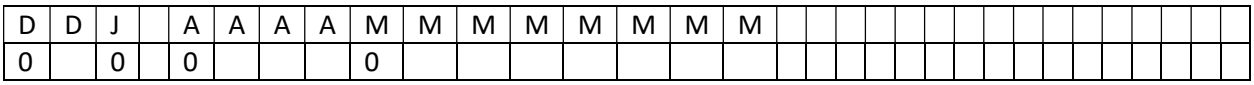
A: 256



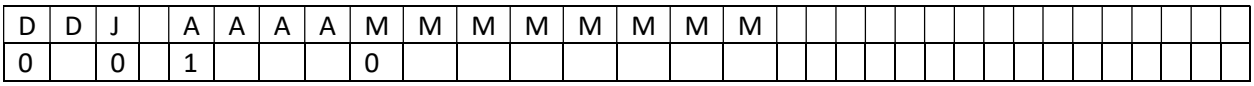
J: 64



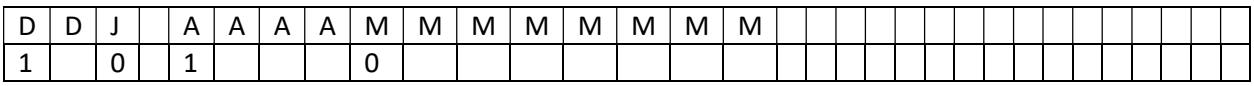
M: 512



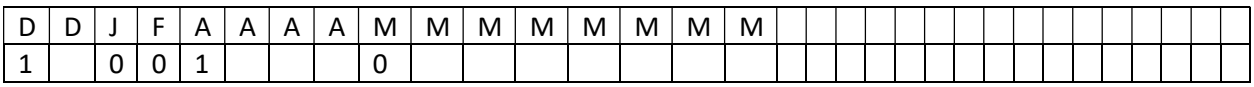
A: 256



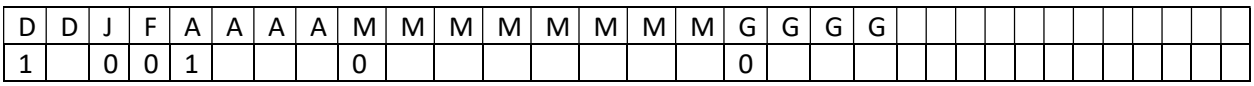
D: 128



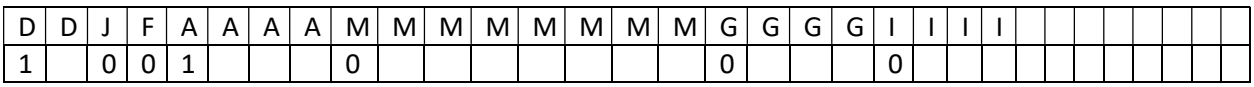
F: 64



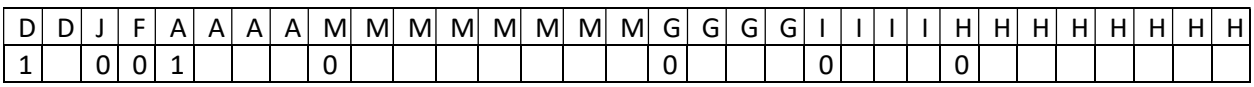
G: 256



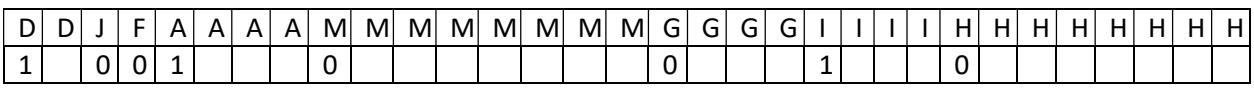
I: 256



H: 512



I: 256



H: 512

D	D	J	F	A	A	A	A	M	M	M	M	M	M	M	M	G	G	G	G	I	I	I	I	H	H	H	H	H	H	H	H
1		0	0	1				0								0				1				1							

J: 64

D	D	J	F	A	A	A	A	M	M	M	M	M	M	M	M	G	G	G	G	I	I	I	I	H	H	H	H	H	H	H	H
1		1	0	1				0								0				1				1							

L: 128

D	D	J		A	A	A	A	L	L							G	G	G	G	I	I	I	I	H	H	H	H	H	H	H	H
1		1		1				0								0				1				1							

K: 512

D	D	J		A	A	A	A									K	K	K	K	K	K	K	K	H	H	H	H	H	H	H	H
0		0		0												0								0							

J: 64

D	D	J		A	A	A	A									K	K	K	K	K	K	K	K	H	H	H	H	H	H	H	H
0		1		0												0								0							

Number of Hits = 6

Number of Misses = 10

External fragmentation in the end: 576 mb

This method causes no integral fragmentation because every process is allocated amount of memory equivalent to what they need. But external fragmentation happens because some processes are too big to fit into smaller slots.

Round Robin:

C: 4	2					2																							
F:10		2					2				2				2				2											
H: 8			2					2				2				2													
M: 10				2					2				2				2			2										
N: 14					2					2				2				2			2	2	2							

Waiting time of

C:8

F:20

H: 24

M:30

N: 32

Average: 22.8

FIFO:

C:4	4				
F:10		10			
H:8			8		
M:10				10	
N:14					14

Waiting time of

C:0

F:4

H: 14

M:22

N: 32

Average: 14.4

SRJB:

C:4	4				
F:10			10		
H:8		8			
M:10				10	
N:14					14

Waiting time of

C:0

F:12

H: 4

M:22

N: 32

Average: 14