

C:\Users\HP\Desktop\OS-Project>a.exe

Enter Memory Size: 2000

Enter the number of processes: 7

Enter process details as stated:

Process ID: 1

Process Arrival Time: 0

Process Lifetime: 200

No of segments of Process: 2

Enter size of segments separated by space: 200 300

Process ID: 2

Process Arrival Time: 0

Process Lifetime: 500

No of segments of Process: 1

Enter size of segments separated by space: 500

Process ID: 3

Process Arrival Time: 0

Process Lifetime: 700

No of segments of Process: 2

Enter size of segments separated by space: 100 100

Process ID: 4

Process Arrival Time: 0

Process Lifetime: 1000

No of segments of Process: 3

Enter size of segments separated by space: 100 400 100

Process ID: 5

Process Arrival Time: 500

Process Lifetime: 600

No of segments of Process: 2

Enter size of segments separated by space: 500 100

Process ID: 6

Process Arrival Time: 600

Process Lifetime: 600

No of segments of Process: 2

Enter size of segments separated by space: 500 100

Process ID: 7

Process Arrival Time: 700

Process Lifetime: 600

No of segments of Process: 1

Enter size of segments separated by space: 200

Press 1 for first fit or 2 for best fit or 3 for worst fit or any other number key for exiting: 2

-----QUEUE STATUS-----

At time $t = 0$, these are the processes present in Queue:

Process: 1 Arrival Time: 0

-----QUEUE STATUS-----

At time $t = 0$, these are the processes present in Queue:

Process: 1 Arrival Time: 0

Process: 2 Arrival Time: 0

-----QUEUE STATUS-----

At time $t = 0$, these are the processes present in Queue:

Process: 1 Arrival Time: 0

Process: 2 Arrival Time: 0

Process: 3 Arrival Time: 0

-----QUEUE STATUS-----

At time $t = 0$, these are the processes present in Queue:

Process: 1 Arrival Time: 0

Process: 2 Arrival Time: 0

Process: 3 Arrival Time: 0

Process: 4 Arrival Time: 0

Process: 1 added at time $t = 0$

-----MEMORY STATUS----- at time $t = 0$

Process :- 1 Segment :- 0 Size :-200 Location :- 0 - 199

Process :- 1 Segment :- 1 Size :-300 Location :- 200 - 499

Hole Present :- Size :- 1500 Location :- 500 - 1999

Process: 2 added at time $t = 0$

-----MEMORY STATUS----- at time $t = 0$

Process :- 1 Segment :- 0 Size :-200 Location :- 0 - 199

Process :- 1 Segment :- 1 Size :-300 Location :- 200 - 499

Process :- 2 Segment :- 0 Size :-500 Location :- 500 - 999

Hole Present :- Size :- 1000 Location :- 1000 - 1999

Process: 3 added at time $t = 0$

-----MEMORY STATUS----- at time $t = 0$

Process :- 1 Segment :- 0 Size :-200 Location :- 0 - 199

Process :- 1 Segment :- 1 Size :-300 Location :- 200 - 499

Process :- 2 Segment :- 0 Size :-500 Location :- 500 - 999

Process :- 3 Segment :- 0 Size :-100 Location :- 1000 - 1099

Process :- 3 Segment :- 1 Size :-100 Location :- 1100 - 1199

Hole Present :- Size :- 800 Location :- 1200 - 1999

Process: 4 added at time $t = 0$

-----MEMORY STATUS----- at time $t = 0$

Process :- 1 Segment :- 0 Size :-200 Location :- 0 - 199

Process :- 1 Segment :- 1 Size :-300 Location :- 200 - 499

Process :- 2 Segment :- 0 Size :-500 Location :- 500 - 999

Process :- 3 Segment :- 0 Size :-100 Location :- 1000 - 1099

Process :- 3 Segment :- 1 Size :-100 Location :- 1100 - 1199

Process :- 4 Segment :- 0 Size :-100 Location :- 1200 - 1299

Process :- 4 Segment :- 1 Size :-100 Location :- 1300 - 1399

Process :- 4 Segment :- 2 Size :-400 Location :- 1400 - 1799

Hole Present :- Size :- 200 Location :- 1800 - 1999

Process: 1 is completed and removed at time t = 200

-----MEMORY STATUS----- at time t = 200

Hole Present :- Size :- 200 Location :- 0 - 199

Hole Present :- Size :- 300 Location :- 200 - 499

Process :- 2 Segment :- 0 Size :-500 Location :- 500 - 999

Process :- 3 Segment :- 0 Size :-100 Location :- 1000 - 1099

Process :- 3 Segment :- 1 Size :-100 Location :- 1100 - 1199

Process :- 4 Segment :- 0 Size :-100 Location :- 1200 - 1299

Process :- 4 Segment :- 1 Size :-100 Location :- 1300 - 1399

Process :- 4 Segment :- 2 Size :-400 Location :- 1400 - 1799

Hole Present :- Size :- 200 Location :- 1800 - 1999

-----QUEUE STATUS-----

At time t = 500, these are the processes present in Queue:

Process: 5 Arrival Time: 500

Process: 2 is completed and removed at time t = 500

-----MEMORY STATUS----- at time t = 500

Hole Present :- Size :- 500 Location :- 0 - 499

Hole Present :- Size :- 500 Location :- 500 - 999

Process :- 3 Segment :- 0 Size :-100 Location :- 1000 - 1099

Process :- 3 Segment :- 1 Size :-100 Location :- 1100 - 1199

Process :- 4 Segment :- 0 Size :-100 Location :- 1200 - 1299

Process :- 4 Segment :- 1 Size :-100 Location :- 1300 - 1399

Process :- 4 Segment :- 2 Size :-400 Location :- 1400 - 1799

Hole Present :- Size :- 200 Location :- 1800 - 1999

Process: 5 added at time t = 500

-----MEMORY STATUS----- at time t = 500

Process :- 5 Segment :- 1 Size :-500 Location :- 0 - 499

Hole Present :- Size :- 500 Location :- 500 - 999

Process :- 3 Segment :- 0 Size :-100 Location :- 1000 - 1099

Process :- 3 Segment :- 1 Size :-100 Location :- 1100 - 1199

Process :- 4 Segment :- 0 Size :-100 Location :- 1200 - 1299

Process :- 4 Segment :- 1 Size :-100 Location :- 1300 - 1399

Process :- 4 Segment :- 2 Size :-400 Location :- 1400 - 1799

Process :- 5 Segment :- 0 Size :-100 Location :- 1800 - 1899

Hole Present :- Size :- 100 Location :- 1900 - 1999

-----QUEUE STATUS-----

At time t = 600, these are the processes present in Queue:

Process: 6 Arrival Time: 600

Process: 6 added at time t = 600

-----MEMORY STATUS----- at time t = 600

Process :- 5 Segment :- 1 Size :-500 Location :- 0 - 499

Process :- 6 Segment :- 1 Size :-500 Location :- 500 - 999

Process :- 3 Segment :- 0 Size :-100 Location :- 1000 - 1099

Process :- 3 Segment :- 1 Size :-100 Location :- 1100 - 1199

Process :- 4 Segment :- 0 Size :-100 Location :- 1200 - 1299

Process :- 4 Segment :- 1 Size :-100 Location :- 1300 - 1399

Process :- 4 Segment :- 2 Size :-400 Location :- 1400 - 1799

Process :- 5 Segment :- 0 Size :-100 Location :- 1800 - 1899

Process :- 6 Segment :- 0 Size :-100 Location :- 1900 - 1999

-----QUEUE STATUS-----

At time t = 700, these are the processes present in Queue:

Process: 7 Arrival Time: 700

Process: 3 is completed and removed at time t = 700

-----MEMORY STATUS----- at time t = 700

Process :- 5 Segment :- 1 Size :-500 Location :- 0 - 499

Process :- 6 Segment :- 1 Size :-500 Location :- 500 - 999

Hole Present :- Size :- 100 Location :- 1000 - 1099

Hole Present :- Size :- 100 Location :- 1100 - 1199

Process :- 4 Segment :- 0 Size :-100 Location :- 1200 - 1299

Process :- 4 Segment :- 1 Size :-100 Location :- 1300 - 1399

Process :- 4 Segment :- 2 Size :-400 Location :- 1400 - 1799

Process :- 5 Segment :- 0 Size :-100 Location :- 1800 - 1899

Process :- 6 Segment :- 0 Size :-100 Location :- 1900 - 1999

Process: 7 added at time t = 700

-----MEMORY STATUS----- at time t = 700

Process :- 5 Segment :- 1 Size :-500 Location :- 0 - 499

Process :- 6 Segment :- 1 Size :-500 Location :- 500 - 999

Process :- 7 Segment :- 0 Size :-200 Location :- 1000 - 1199

Process :- 4 Segment :- 0 Size :-100 Location :- 1200 - 1299

Process :- 4 Segment :- 1 Size :-100 Location :- 1300 - 1399

Process :- 4 Segment :- 2 Size :-400 Location :- 1400 - 1799

Process :- 5 Segment :- 0 Size :-100 Location :- 1800 - 1899

Process :- 6 Segment :- 0 Size :-100 Location :- 1900 - 1999

Process: 4 is completed and removed at time t = 1000

-----MEMORY STATUS----- at time t = 1000

Process :- 5 Segment :- 1 Size :-500 Location :- 0 - 499

Process :- 6 Segment :- 1 Size :-500 Location :- 500 - 999

Process :- 7 Segment :- 0 Size :-200 Location :- 1000 - 1199

Hole Present :- Size :- 100 Location :- 1200 - 1299

Hole Present :- Size :- 100 Location :- 1300 - 1399
Hole Present :- Size :- 400 Location :- 1400 - 1799
Process :- 5 Segment :- 0 Size :-100 Location :- 1800 - 1899
Process :- 6 Segment :- 0 Size :-100 Location :- 1900 - 1999
Process: 5 is completed and removed at time t = 1100
-----MEMORY STATUS----- at time t = 1100
Hole Present :- Size :- 500 Location :- 0 - 499
Process :- 6 Segment :- 1 Size :-500 Location :- 500 - 999
Process :- 7 Segment :- 0 Size :-200 Location :- 1000 - 1199
Hole Present :- Size :- 600 Location :- 1200 - 1799
Hole Present :- Size :- 100 Location :- 1800 - 1899
Process :- 6 Segment :- 0 Size :-100 Location :- 1900 - 1999
Process: 6 is completed and removed at time t = 1200
-----MEMORY STATUS----- at time t = 1200
Hole Present :- Size :- 500 Location :- 0 - 499
Hole Present :- Size :- 500 Location :- 500 - 999
Process :- 7 Segment :- 0 Size :-200 Location :- 1000 - 1199
Hole Present :- Size :- 700 Location :- 1200 - 1899
Hole Present :- Size :- 100 Location :- 1900 - 1999
Process: 7 is completed and removed at time t = 1300
-----MEMORY STATUS----- at time t = 1300
Hole Present :- Size :- 1000 Location :- 0 - 999
Hole Present :- Size :- 200 Location :- 1000 - 1199
Hole Present :- Size :- 800 Location :- 1200 - 1999
Average turnaround time is: 600