```
C:\Windows\System32\cmd.exe                                        —    □    ✕

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
```

```
C:\Windows\System32\cmd.exe                                    —   □   X

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: 1
--------------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
```

```
C:\Windows\System32\cmd.exe                                    —    □    ✕

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
```

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 :-400 Location :- 1300 - 1699

Process :- 4 Segment :- 2 Size :-100 Location :- 1700 - 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

```
C:\Windows\System32\cmd.exe                                                    —    □    ✕

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

Process :- 4 Segment :- 1 Size :-400 Location :- 1300 - 1699

Process :- 4 Segment :- 2 Size :-100 Location :- 1700 - 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 :-400 Location :- 1300 - 1699

Process :- 4 Segment :- 2 Size :-100 Location :- 1700 - 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
```

```
C:\Windows\System32\cmd.exe                                        —    □    ✕

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 :-400 Location :- 1300 - 1699

Process :- 4 Segment :- 2 Size :-100 Location :- 1700 - 1799

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

Process: 5 added at time t = 500

---------------MEMORY STATUS--------------- at time t = 500
Process :- 5 Segment :- 0 Size :-500 Location :- 0 - 499

Process :- 5 Segment :- 1 Size :-100 Location :- 500 - 599

Hole Present :-  Size :- 400 Location :- 600 - 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 :-400 Location :- 1300 - 1699

Process :- 4 Segment :- 2 Size :-100 Location :- 1700 - 1799

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

--------------QUEUE STATUS-----------
At time t = 600, these are the processes present in Queue:
Process: 6 Arrival Time: 600
```

```
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 :-400 Location :- 1300 - 1699

Process :- 4 Segment :- 2 Size :-100 Location :- 1700 - 1799

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

--------------QUEUE STATUS-----------
At time t = 600, these are the processes present in Queue:
Process: 6 Arrival Time: 600

--------------QUEUE STATUS-----------
At time t = 700, these are the processes present in Queue:
Process: 6 Arrival Time: 600
Process: 7 Arrival Time: 700

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

---------------MEMORY STATUS---------------- at time t = 700
Process :- 5 Segment :- 0 Size :-500 Location :- 0 - 499

Process :- 5 Segment :- 1 Size :-100 Location :- 500 - 599

Hole Present :-  Size :- 400 Location :- 600 - 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 :-400 Location :- 1300 - 1699

Process :- 4 Segment :- 2 Size :-100 Location :- 1700 - 1799

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

Process: 6 added at time t = 700

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

```
C:\Windows\System32\cmd.exe                                    —   □   X

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 :-400 Location :- 1300 - 1699

Process :- 4 Segment :- 2 Size :-100 Location :- 1700 - 1799

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

Process: 6 added at time t = 700

---------------MEMORY STATUS--------------- at time t = 700
Process :- 5 Segment :- 0 Size :-500 Location :- 0 - 499

Process :- 5 Segment :- 1 Size :-100 Location :- 500 - 599

Process :- 6 Segment :- 0 Size :-500 Location :- 600 - 1099

Process :- 6 Segment :- 1 Size :-100 Location :- 1100 - 1199

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

Process :- 4 Segment :- 1 Size :-400 Location :- 1300 - 1699

Process :- 4 Segment :- 2 Size :-100 Location :- 1700 - 1799

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

Process: 7 added at time t = 700

---------------MEMORY STATUS--------------- at time t = 700
Process :- 5 Segment :- 0 Size :-500 Location :- 0 - 499

Process :- 5 Segment :- 1 Size :-100 Location :- 500 - 599

Process :- 6 Segment :- 0 Size :-500 Location :- 600 - 1099

Process :- 6 Segment :- 1 Size :-100 Location :- 1100 - 1199

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

Process :- 4 Segment :- 1 Size :-400 Location :- 1300 - 1699
```

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

Process: 7 added at time t = 700

---------------MEMORY STATUS--------------- at time t = 700
Process :- 5 Segment :- 0 Size :-500 Location :- 0 - 499

Process :- 5 Segment :- 1 Size :-100 Location :- 500 - 599

Process :- 6 Segment :- 0 Size :-500 Location :- 600 - 1099

Process :- 6 Segment :- 1 Size :-100 Location :- 1100 - 1199

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

Process :- 4 Segment :- 1 Size :-400 Location :- 1300 - 1699

Process :- 4 Segment :- 2 Size :-100 Location :- 1700 - 1799

Process :- 7 Segment :- 0 Size :-200 Location :- 1800 - 1999

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

---------------MEMORY STATUS--------------- at time t = 1000
Process :- 5 Segment :- 0 Size :-500 Location :- 0 - 499

Process :- 5 Segment :- 1 Size :-100 Location :- 500 - 599

Process :- 6 Segment :- 0 Size :-500 Location :- 600 - 1099

Process :- 6 Segment :- 1 Size :-100 Location :- 1100 - 1199

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

Hole Present :- Size :- 400 Location :- 1300 - 1699

Hole Present :- Size :- 100 Location :- 1700 - 1799

Process :- 7 Segment :- 0 Size :-200 Location :- 1800 - 1999

Process: 5 is completed and removed at time t = 1100

---------------MEMORY STATUS--------------- at time t = 1100
Hole Present :- Size :- 500 Location :- 0 - 499

Hole Present :- Size :- 100 Location :- 500 - 599

Process :- 6 Segment :- 1 Size :-100 Location :- 1100 - 1199

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

Hole Present :- Size :- 400 Location :- 1300 - 1699

Hole Present :- Size :- 100 Location :- 1700 - 1799

Process :- 7 Segment :- 0 Size :-200 Location :- 1800 - 1999

Process: 5 is completed and removed at time t = 1100

---------------MEMORY STATUS---------------- at time t = 1100
Hole Present :- Size :- 500 Location :- 0 - 499

Hole Present :- Size :- 100 Location :- 500 - 599

Process :- 6 Segment :- 0 Size :-500 Location :- 600 - 1099

Process :- 6 Segment :- 1 Size :-100 Location :- 1100 - 1199

Hole Present :- Size :- 600 Location :- 1200 - 1799

Process :- 7 Segment :- 0 Size :-200 Location :- 1800 - 1999

Process: 6 is completed and removed at time t = 1300

---------------MEMORY STATUS---------------- at time t = 1300
Hole Present :- Size :- 600 Location :- 0 - 599

Hole Present :- Size :- 500 Location :- 600 - 1099

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

Hole Present :- Size :- 600 Location :- 1200 - 1799

Process :- 7 Segment :- 0 Size :-200 Location :- 1800 - 1999

Process: 7 is completed and removed at time t = 1300

---------------MEMORY STATUS---------------- at time t = 1300
Hole Present :- Size :- 600 Location :- 0 - 599

Hole Present :- Size :- 500 Location :- 600 - 1099

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

```
Hole Present :-  Size :- 500 Location :- 600 - 1099

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

Hole Present :-  Size :- 600 Location :- 1200 - 1799

Process :- 7 Segment :- 0 Size :-200 Location :- 1800 - 1999

Process: 7 is completed and removed at time t = 1300

---------------MEMORY STATUS--------------- at time t = 1300
Hole Present :-  Size :- 600 Location :- 0 - 599

Hole Present :-  Size :- 500 Location :- 600 - 1099

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

Hole Present :-  Size :- 600 Location :- 1200 - 1799

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


Average turnaround time is: 614.286

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
```

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

```
C:\Windows\System32\cmd.exe                                    —    □    X

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
```

```
C:\Windows\System32\cmd.exe                                          —    □    X

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 :- 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

```
C:\Windows\System32\cmd.exe                                                  —   □   X

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
```

```
C:\Windows\System32\cmd.exe                                          —    □    X

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
```

```
C:\Windows\System32\cmd.exe                                                    —    ☐    ✕

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
```

```
C:\Windows\System32\cmd.exe                                          —   □   X

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
```

```
C:\Windows\System32\cmd.exe                                                              —    □    X

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

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

```
C:\Windows\System32\cmd.exe                                              —     □     X

-------------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
```

```
C:\Windows\System32\cmd.exe                                                      —    □    ✕

---------------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
```

```
C:\Windows\System32\cmd.exe                                    —    □    X

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
```

```
C:\Windows\System32\cmd.exe                                                    —    □    X

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
```

```
---------------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

--------------QUEUE STATUS-----------
At time t = 700, these are the processes present in Queue:
Process: 6 Arrival Time: 600
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

Hole Present :-  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
```

```
C:\Windows\System32\cmd.exe                                    —    □    X

---------------MEMORY STATUS--------------- at time t = 700
Process:     Segment :- 1 Size :-500 Location :- 0 - 499

Hole P      -   Size :- 500 Location :- 500 - 999

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

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

Process:       egment :- 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

Process: 6 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

Hole Present :-  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: 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 :- 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
```

```
C:\Windows\System32\cmd.exe                                                    —    □    X

---------------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 = 1300

---------------MEMORY STATUS--------------- at time t = 1300
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
```

```
C:\Windows\System32\cmd.exe                                                    —    □    X

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

Process: 6 is completed and removed at time t = 1300

---------------MEMORY STATUS--------------- at time t = 1300
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 :- 500 Location :- 0 - 499

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

Hole Present :-  Size :- 200 Location :- 1000 - 1199

Hole Present :-  Size :- 700 Location :- 1200 - 1899

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


Average turnaround time is: 614.286

Press 1 for first fit or 2 for best fit or 3 for worst fit or any other number key for exiting: 4

C:\Users\HP\Desktop\OS-Project>_
```