```
sl-1c8@sl1c8-HP-EliteDesk-800-G1-TWR:/media/sl-1c8/CA0B-ABE7/ASS01$ sh 1.sh
Student Database
1.CREATE 2.INSERT 3.DISPLAY 4. SEARCH 5.DELETE 6.UPDATE 7. EXIT
Enter the Choice
File Already Present
Do you Want to Continue (Press 0)
Student Database
1.CREATE 2.INSERT 3.DISPLAY 4. SEARCH 5.DELETE 6.UPDATE 7. EXIT
Enter the Choice
2
Enter the Regno:22320
Enter the Name: Subham
Enter the Mobile:98245
Record Inserted Successfully
Do you Want to Continue (Press 0)
Student Database
1.CREATE 2.INSERT 3.DISPLAY 4. SEARCH 5.DELETE 6.UPDATE 7. EXIT
Enter the Choice
2
Enter the Regno:22318
Enter the Name:a
Enter the Mobile:7863
Record Inserted Successfully
Do you Want to Continue (Press 0)
0
Student Database
1.CREATE 2.INSERT 3.DISPLAY 4. SEARCH 5.DELETE 6.UPDATE 7. EXIT
Enter the Choice
1. All records 2.Top Records 3. Bottom Records
1001 Amit 99999
1005 Manish 897879
1008 Rahul 87945
```

22320 Subham 98245

```
1
1001 Amit 99999
1005 Manish 897879
1008 Rahul 87945
22320 Subham 98245
22318 a 7863
Do you Want to Continue (Press 0)
Student Database
1.CREATE 2.INSERT 3.DISPLAY 4. SEARCH 5.DELETE 6.UPDATE 7. EXIT
Enter the Choice
4
Enter the Regno:22320
Record Present
22320 Subham 98245
Do you Want to Continue (Press 0)
5
sl-1c8@sl1c8-HP-EliteDesk-800-G1-TWR:/media/sl-1c8/CA08-ABE7/ASS01$ sh 1.sh
Student Database
1.CREATE 2.INSERT 3.DISPLAY 4. SEARCH 5.DELETE 6.UPDATE 7. EXIT
Enter the Choice
5
Enter the Regno:22318
Record Deleted
Do you Want to Continue (Press 0)
Student Database
1.CREATE 2.INSERT 3.DISPLAY 4. SEARCH 5.DELETE 6.UPDATE 7. EXIT
Enter the Choice
3

    All records 2.Top Records 3. Bottom Records

1001 Amit 99999
1005 Manish 897879
1008 Rahul 87945
22320 Subham 98245
```

Do you Want to Continue (Press 0)

```
101 Anit 99999
1005 Manish 897879
1008 Manish 897879
1008 Manish 897879
1008 Rahul 87945
22318 A 7863
10 you Want to Continue (Press 0)
0
5 Student Database
1.CREATE 2.INSERT 3.DISPLAY 4. SEARCH 5.DELETE 6.UPDATE 7. EXIT Enter the Choice
4
6 Enter the Regno:22320
Record Present
22320 Subhan 98245
10 you Want to Continue (Press 0)
5 St.1c8811c8-HP-EliteDesk-800-G1-TWR:/media/sl-ic8/CA88-AME7/ASS015 sh 1.sh
5 Student Database
1.CREATE 2.INSERT 3.DISPLAY 4. SEARCH 5.DELETE 6.UPDATE 7. EXIT Enter the Choice
5 Enter the Regno:22318
Record Deleted
10 you Want to Continue (Press 0)
0 you Want to Continue (Press 0)
0 Student Database
1.CREATE 2.INSERT 3.DISPLAY 4. SEARCH 5.DELETE 6.UPDATE 7. EXIT Enter the Choice
3 1. All records 2.Top Records 3. Battom Records
1 1 All records 2.Top Records 3. Battom Records
1 1001 Anit 99999
1005 Manish 897877
1008 Rahul 897875
1008 Rahul 897875
1008 Rahul 879787
1008 Rahul 879787
1009 you Want to Continue (Press 0)
```

sl-1c8@sl1c8-HP-EliteDesk-800-G1-TWR: /media/sl-1c8/CA0B-ABE7/ASS01

```
enter the details of process: enter arrival time of 1 process: 0
enter burst time of 1 process: 4
enter arrival time of 2 process: 1
enter burst time of 2 process: 2
enter arrival time of 3 process: 3
enter burst time of 3 process: 3
enter arrival time of 4 process: 4
enter burst time of 4 process: 2
enter arrival time of 5 process: 5
enter arrival time of 5 process: 1
enter burst time of 5 process: 1
the avg waiting time is: 2.400000the avg turnaround time is: 4.800000
```

enter total number of processes: 5

```
Enter the total number of processes: 4
Enter the arrival and burst times for each process:
Process 1 Arrival Time: 0
Process 1 Burst Time: 8
Process 2 Arrival Time: 1
Process 2 Burst Time: 4
Process 3 Arrival Time: 2
Process 3 Burst Time: 9
Process 4 Arrival Time: 3
Process 4 Burst Time: 5
```

Process	Burst Time	Arrival Time	Waiting Time	Turnaround Time
1	8	0	15	23
2	4	1	7	11
3	9	2	15	24
4	5	3	13	18

Average Waiting Time: 12.50 Average Turnaround Time: 19.00

Enter time quantum: 2

...Program finished with exit code 0

```
3 element is added at location 0
```

- 3 element is extracted from location 1
- 6 element is added at location 1
- 0 element is extracted from location 3
- 7 element is added at location 2
- 0 element is extracted from location 5
- 5 element is added at location 3
- 0 element is extracted from location 7
- 3 element is added at location 4
- 0 element is extracted from location 9
- 5 element is added at location 5
- 3 element is extracted from location 1
- 6 element is added at location 6
- 7 element is extracted from location 3
- 2 element is added at location 7
- 3 element is extracted from location 5
- 9 element is added at location 8
- 6 element is extracted from location 7
- 1 element is added at location 9
- 9 element is extracted from location 9
- 2 element is added at location 0
- 2 element is extracted from location 1
- 7 element is added at location 1

```
2 Philosopher is eating
4 Philosopher is eating
2 Philosopher eating is over
4 Philosopher eating is over
3 Philosopher is eating
1 Philosopher is eating
3 Philosopher eating is over
1 Philosopher eating is over
1 Philosopher eating is over
0 Philosopher eating is over
0 Philosopher eating is over
```

ı

...Program finished with exit code 0