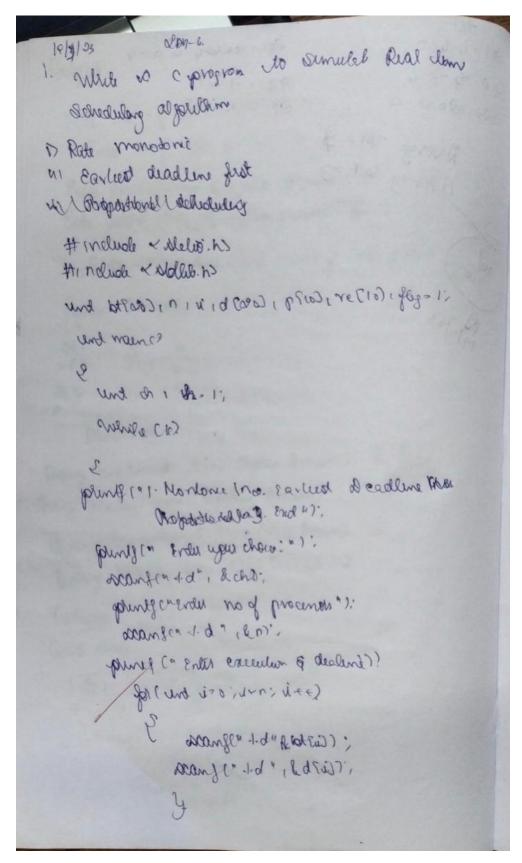
OS LAB-5

Q) Write a C program to simulate Real-Time CPU Scheduling algorithms: a)Earliest deadline first b) producer-consumer problem using semaphores.

CODE-



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  0 p2 0 p3 (4 p1 5 pe 7 p19 bdb 10
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19/4/23 dAB-5
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              mulay = Synel (muter ):
                       (2 60) page leads
   Output
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 2. Consum
 3. Enit
   Enter your choia: 2
      Buffer un Empty
10 00 Exten your chara: 1
    Ovoduce producer usem 1:
    Consumer consumer ulem
```

OUTPUT-

Earliest Deadline First

```
Enter your choice:
1. Monotonic
2. EDF
3. Exit
2
Enter the number of processes: 3
Enter execution times:
3 2 2
Enter deadlines:
20 5 10
0 P2 2 P3 4 P1 7 P2 9 Idle 10 P2 12 P3 14 Idle 15 P2 17 Idle 20 P2
```

Producer-Consumer Problem

```
1.Producer
2.Consumer
3.Exit
Enter your choice:2
Buffer is empty!!
Enter your choice:1
Producer produces the item 1
Enter your choice:1
Producer produces the item 2
Enter your choice:2
Consumer consumes item 2
Enter your choice:2
Consumer consumes item 1
Enter your choice:3
                         execution time : 11.602 s
Process returned 0 (0x0)
Press any key to continue.
```