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1. //Source code for queue operations using linked list:
2. include <stdlib.h>
3. include <conio.h>
4. struct queue
5. {
6. int data;
7. struct queue *next;
8. };
9. typedef struct queue node;
10. node *front = NULL;
11. node *rear = NULL;
12. node* getnode()
13. {
14. node *temp;
15. temp = (node *) malloc(sizeof(node)) ;
16. printf("\n Enter data ");
17. scanf("%d", &temp -> data);
18. temp -> next = NULL; return
19. temp;
20. }
21. void insertQ()
22. {
23. node *newnode;
24. newnode = getnode();
25. if(newnode == NULL)
26. {
27. printf("\n Queue Full");
28. return;
29. }
30. if(front == NULL)
31. {
32. front = newnode;
33. rear = newnode;
34. }
35. else
36. {
37. rear -> next = newnode;
38. rear = newnode;
39. }
40. printf("\n\n\t Data Inserted into the Queue..");
41. }
42. void deleteQ()
43. {
44. node *temp;
45. if(front == NULL)
46. {
47. printf("\n\n\t Empty Queue..");
48. return;
49. }
50. temp = front;
51. front = front -> next;
52. printf("\n\n\t Deleted element from queue is %d ", temp ->
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53. data); free(temp);
54. }
55.
56.
57. void displayQ()
58. {
59. node *temp;
60. if(front == NULL)
61. {
62. printf("\n\n\t\t Empty Queue ");
63. }
64. else
65. {
66. temp = front;
67. printf("\n\n\n\t\t Elements in the Queue are: ");
68. while(temp != NULL )
69. {
70. printf("%5d ", temp -> data);
71. temp = temp -> next;
72. }
73. }
74. }
75. char menu()
76. {
77. char ch;
78. clrscr();
79. printf("\n \t..Queue operations using pointers.. ");
80. printf("\n\t -----*****-----\n");
81. printf("\n 1. Insert ");
82. printf("\n 2. Delete ");
83. printf("\n 3. Display");
84. printf("\n 4. Quit ");
85. printf("\n Enter your choice: ");
86. ch = getche();
87. return ch;
88. }
89. void main()
90. {
91. char ch;
92. do
93. {
94. ch = menu();
95. switch(ch)
96. {
97. case '1' :
98. insertQ();
99. break;
100. case '2' :
101. deleteQ();
102. break;
103. case '3' :
104. displayQ();

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105.     break;
106.     case '4':
107.     return;
108.     }
109.     getch();
110.     } while(ch != '4');
111.     }
112.
113.
114.
```