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1.  //Source code for Circular Queue operations, using array:
2.  #include<stdio.h>
3.  //#include <conio.h>
4.  #define MAX 6
5.  int CQ[MAX];
6.  int front = 0;
7.  int rear = 0;
8.  int count = 0;
9.  void insertCQ()
10. {
11. int data;
12. if(count == MAX)
13. {
14. printf("\n Circular Queue is Full");
15. }
16. else
17. {
18. printf("\n Enter data: ");
19. scanf("%d", &data);
20. CQ[rear] = data;
21. rear = (rear + 1) % MAX;
22. count ++;
23. printf("\n Data Inserted in the Circular Queue ");
24. }
25. }
26. void deleteCQ()
27. {
28. if(count == 0)
29. {
30. printf("\n\nCircular Queue is Empty..");
31. }
32. else
33. {
34. printf("\n Deleted element from Circular Queue is %d ", CQ[front]);
35. front = (front + 1) % MAX;
36. count --;
37. }
38. }
39. void displayCQ()
40. {
41. int i, j;
42. if(count == 0)
43. {
44. printf("\n\n\t Circular Queue is Empty ");
45. }
46. else
47. {
48. printf("\n Elements in Circular Queue are: ");
49. j = count;
50. for(i = front; j != 0; j--)
51. {
52. printf("%d\t", CQ[i]);
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53. i = (i + 1) % MAX;
54. }
55. }
56. }
57. int menu()
58. {
59. int ch;
60. //clrscr();
61. printf("\n \t Circular Queue Operations using ARRAY..");
62. printf("\n -----------**********-------------\n");
63. printf("\n 1. Insert ");
64. printf("\n 2. Delete ");
65. printf("\n 3. Display");
66. printf("\n 4. Quit ");
67. printf("\n Enter Your Choice:");
68. scanf("%d", &ch);
69. return ch;
70. }
71. void main()
72. {
73. int ch;
74. do
75. {
76. ch = menu();
77. switch(ch)
78. {
79. case 1:
80. insertCQ();
81. break;
82. case 2:
83. deleteCQ();
84. break;
85. case 3:
86. displayCQ();
87. break;
88. case 4:
89. return;
90. default:
91. printf("\n Invalid Choice ");
92. }
93. //getch();
94. } while(1);
95. }
```