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Q1.c - C language - Visual Studio Code

EXPLORES

OPEN EDITORS

C LANGUAGE

.vscode

launch.json

tasks.json

Competition

File

PVSCode

Sem1

Sem2

Sem3

Assignment 1

Assignment 2

Assignment 3

Assignment 4

Assignment 4.1

Assignment 5

Q1 (1).png

Q1 (2).png

Q1 (3).png

Q1.c

Q1.exe

Q2 (1).png

Q2 (2).png

Q2 (3).png

Q2 (4).png

Q2 (5).png

Q2.c

Q2.exe

Assignment 5.1

VS_Sem2

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OUTLINE

Sem3 > Assignment 5 > C Q1.c > ini(Queue *)

1#include <stdio.h>

2#include <stdlib.h>

3typedef struct Queue

4{

5int front;

6int rear;

7int n;

8int *arr;

9}Queue;

10Queue *ini(Queue *Q)

11{

12Q->front = -1;

13Q->rear = -1;

14printf("Enter the size\n");

15scanf("%d",&Q->n);

16Q->arr = (int*)malloc(Q->n*sizeof(Q->arr));

17}

18Queue *enqueue(Queue *Q,int num)

19{

20if((Q->n) == Q->rear)

21printf("QUEUE OVERFLOW\n");

22else

23{

24if(Q->front == -1 && Q->rear == -1)

25{

26Q->front = 0;

27Q->rear = 0;

28}

29printf("Enter a number\n");

30scanf("%d",&num);

31Q->arr[Q->rear] = num;

32Q->rear++;

33}

34}

35Queue *dequeue(Queue *Q)

36{

37if(Q->rear == Q->front && Q->front != 0)

38printf("QUEUE UNDERFLOW\n");

39else

40{

PROBLEMS

OUTPUT

DEBUG CONSOLE

TERMINAL

Code

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Enter 1 to Enter Queue

Enter 2 to Delete Queue

Enter 3 to Print the Stack

Enter 0 to Stop

1

Enter a number

3

Enter 1 to Enter Queue

Enter 2 to Delete Queue

Enter 3 to Print the Stack

Enter 0 to Stop

1

Enter a number

2

Enter 1 to Enter Queue

Enter 2 to Delete Queue

Enter 3 to Print the Stack

Enter 0 to Stop

1

Enter a number

5

Enter 1 to Enter Queue

Enter 2 to Delete Queue

Enter 3 to Print the Stack

Enter 0 to Stop

3

QUEUE :

4 3 2 5

Enter 1 to Enter Queue

Enter 2 to Delete Queue

Enter 3 to Print the Stack

Enter 0 to Stop

2

DELETED ELEMENT : 4

Enter 1 to Enter Queue

Enter 2 to Delete Queue

Enter 3 to Print the Stack

Enter 0 to Stop

0

Activate Windows

Go to Settings to activate Windows.

e:\C language\Sem3\Assignment 5>

Ln 14, Col 27

Spaces: 4

UTF-8

CRLF

C

Win32

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C LANGUAGE

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Assignment 4.1

Assignment 5

Q1 (1).png

Q1 (2).png

Q1 (3).png

Q1.c

Q1.exe

Q2 (1).png

Q2 (2).png

Q2 (3).png

Q2 (4).png

Q2 (5).png

Q2.c

Q2.exe

Assignment 5.1

VS_Sem2

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OUTLINE

Q1.c

Q2.c

Sem3 > Assignment 5 > C Q1.c > ini(Queue *)

```
27 Q->rear = 0;
28 }
29 printf("Enter a number\n");
30 scanf("%d",&num);
31 Q->arr[Q->rear] = num;
32 Q->rear++;
33 }
34 }
35 Queue *dequeue(Queue *Q)
36 {
37     if(Q->rear == Q->front && Q->front != 0)
38         printf("QUEUE UNDERFLOW\n");
39     else
40     {
41         printf("DELETED ELEMENT : %d",Q->arr[Q->front]);
42         Q->front++;
43     }
44 }
45 Queue display(Queue *Q)
46 {
47     printf("QUEUE : \n");
48     for(int i = Q->front; i<Q->rear;i++)
49         printf("%d ",Q->arr[i]);
50 }
51 int main()
52 {
53     printf("DISHA UPRETI F\n");
54     int num;
55     Queue *Q = (Queue*)malloc(sizeof(Q));
56     ini(Q);
57     int p = -1;
58     while (p != 0)
59     {
60         printf("\nEnter 1 to Enter Queue\n");
61         printf("Enter 2 to Delete Queue\n");
62         if(Q->rear!=Q->front)
63             printf("Enter 3 to Print the Stack\n");
64         printf("Enter 0 to Stop\n");
65         scanf("%d", &p);
66         switch (p)
```

PROBLEMS

OUTPUT

DEBUG CONSOLE

TERMINAL

Code

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```
Enter 1 to Enter Queue
Enter 2 to Delete Queue
Enter 3 to Print the Stack
Enter 0 to Stop
1
Enter a number
3

Enter 1 to Enter Queue
Enter 2 to Delete Queue
Enter 3 to Print the Stack
Enter 0 to Stop
1
Enter a number
2

Enter 1 to Enter Queue
Enter 2 to Delete Queue
Enter 3 to Print the Stack
Enter 0 to Stop
1
Enter a number
5

Enter 1 to Enter Queue
Enter 2 to Delete Queue
Enter 3 to Print the Stack
Enter 0 to Stop
3
QUEUE :
4 3 2 5
Enter 1 to Enter Queue
Enter 2 to Delete Queue
Enter 3 to Print the Stack
Enter 0 to Stop
2
DELETED ELEMENT : 4
Enter 1 to Enter Queue
Enter 2 to Delete Queue
Enter 3 to Print the Stack
Enter 0 to Stop
0
e:\C language\Sem3\Assignment 5>
```

0 0 0

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FileEditSelectionViewGoRunTerminalHelp

Q2.c - C language - Visual Studio Code

EXPLORER

OPEN EDITORS

C Q1.c Sem3\Assig...

X C Q2.c Sem3\Assig...

C LANGUAGE

.vscode

launch.json

tasks.json

Competition

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PVScode

Sem1

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Q1 (1).png

Q1 (2).png

Q1 (3).png

C Q1.c

Q1.exe

Q2 (1).png

Q2 (2).png

Q2 (3).png

Q2 (4).png

Q2 (5).png

C Q2.c

Q2.exe

Assignment 5.1

VS_Sem2

letusc-yashwantkanet...

OUTLINE

Sem3 > Assignment 5 > C Q2.c > ini(Queue *)

54 {

55 printf("\n Queue is empty !! \n");

56 return -1;

57 }

58 else

59 {

60 element = Q->arr[Q->front];

61 if (Q->front == Q->rear)

62 {

63 Q->front = -1;

64 Q->rear = -1;

65 }

66 else

67 {

68 Q->front = (Q->front + 1) % Q->n;

69 }

70 printf("\n Deleted element -> %d \n", element);

71 return element;

72 }

73 }

74 void display(Queue *Q) {

75 int i;

76 if (isEmpty(Q))

77 printf(" \n Empty Queue\n");

78 else

79 {

80

81 printf("\n Front -> %d ", Q->front);

82 printf("\n Items -> ");

83

84 for (i = Q->front; i != Q->rear; i = (i + 1) % Q->n)

85 printf("%d ", Q->arr[i]);

86 printf("%d ", Q->arr[i]);

87 printf("\n Rear -> %d \n", Q->rear);

88 }

89 }

90 int main()

91 {

92 printf("DISHA UPRETI F\n");

PROBLEMS

OUTPUT

DEBUG CONSOLE

TERMINAL

Code

Enter 3 to Print the Queue

Enter 0 to Stop

1

Enter the element

3

Inserted -> 3

Enter 1 to Enter Queue

Enter 2 to Delete Queue

Enter 3 to Print the Queue

Enter 0 to Stop

1

Enter the element

4

Inserted -> 4

Enter 1 to Enter Queue

Enter 2 to Delete Queue

Enter 3 to Print the Queue

Enter 0 to Stop

3

Front -> 0

Items -> 1 2 3 4

Rear -> 3

Enter 1 to Enter Queue

Enter 2 to Delete Queue

Enter 3 to Print the Queue

Enter 0 to Stop

1

Enter the element

12

Inserted -> 12

Enter 1 to Enter Queue

Enter 2 to Delete Queue

Enter 3 to Print the Queue

Enter 0 to Stop

2

Deleted element -> 1

Enter 1 to Enter Queue

Enter 2 to Delete Queue

Ln 12, Col 18

Spaces: 2

UTF-8

CRLF

C

Win32

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Q2.c - C language - Visual Studio Code

EXPLORER

...

Q1.c

Q2.c

X

OPEN EDITORS

Sem3 > Assignment 5 > Q2.c > ini(Queue *)

C Q1.c Sem3\Assign...

X C Q2.c Sem3\Assign...

C LANGUAGE

.vscode

{ launch.json

{ tasks.json

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> PVSCode

> Sem1

> Sem2

> Sem3

> Assignment 1

> Assignment 2

> Assignment 3

> Assignment 4

> Assignment 4.1

> Assignment 5

Q1 (1).png

Q1 (2).png

Q1 (3).png

C Q1.c

Q1.exe

Q2 (1).png

Q2 (2).png

Q2 (3).png

Q2 (4).png

Q2 (5).png

C Q2.c

Q2.exe

> Assignment 5.1

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> OUTLINE

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219

220

221

for (i = Q->front; i != Q->rear; i = (i + 1) % Q->n)

printf("%d ", Q->arr[i]);

printf("%d ", Q->arr[i]);

printf("\n Rear -> %d \n", Q->rear);

}

}

int main()

{

printf("DISHA UPRETI F\n");

int num;

Queue *Q = (Queue*)malloc(sizeof(Q));

ini(Q);

int p = -1;

while (p != 0)

{

printf("\nEnter 1 to Enter Queue\n");

printf("Enter 2 to Delete Queue\n");

printf("Enter 3 to Print the Queue\n");

printf("Enter 0 to Stop\n");

scanf("%d", &p);

switch (p)

{

case 1:

enqueue(Q);

break;

case 2:

dequeue(Q);

break;

case 3:

display(Q);

break;

case 0:

free(Q);

continue;

default:

printf("INVALID CHOICE\n");

}

}

}

PROBLEMS

OUTPUT

DEBUG CONSOLE

TERMINAL

Code

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+

+

+

+

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+

Inserted -> 4

Enter 1 to Enter Queue

Enter 2 to Delete Queue

Enter 3 to Print the Queue

Enter 0 to Stop

3

Front -> 0

Items -> 1 2 3 4

Rear -> 3

Enter 1 to Enter Queue

Enter 2 to Delete Queue

Enter 3 to Print the Queue

Enter 0 to Stop

1

Enter the element

12

Inserted -> 12

Enter 1 to Enter Queue

Enter 2 to Delete Queue

Enter 3 to Print the Queue

Enter 0 to Stop

2

Deleted element -> 1

Enter 1 to Enter Queue

Enter 2 to Delete Queue

Enter 3 to Print the Queue

Enter 0 to Stop

3

Front -> 1

Items -> 2 3 4 12

Rear -> 4

Enter 1 to Enter Queue

Enter 2 to Delete Queue

Enter 3 to Print the Queue

Enter 0 to Stop

0

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