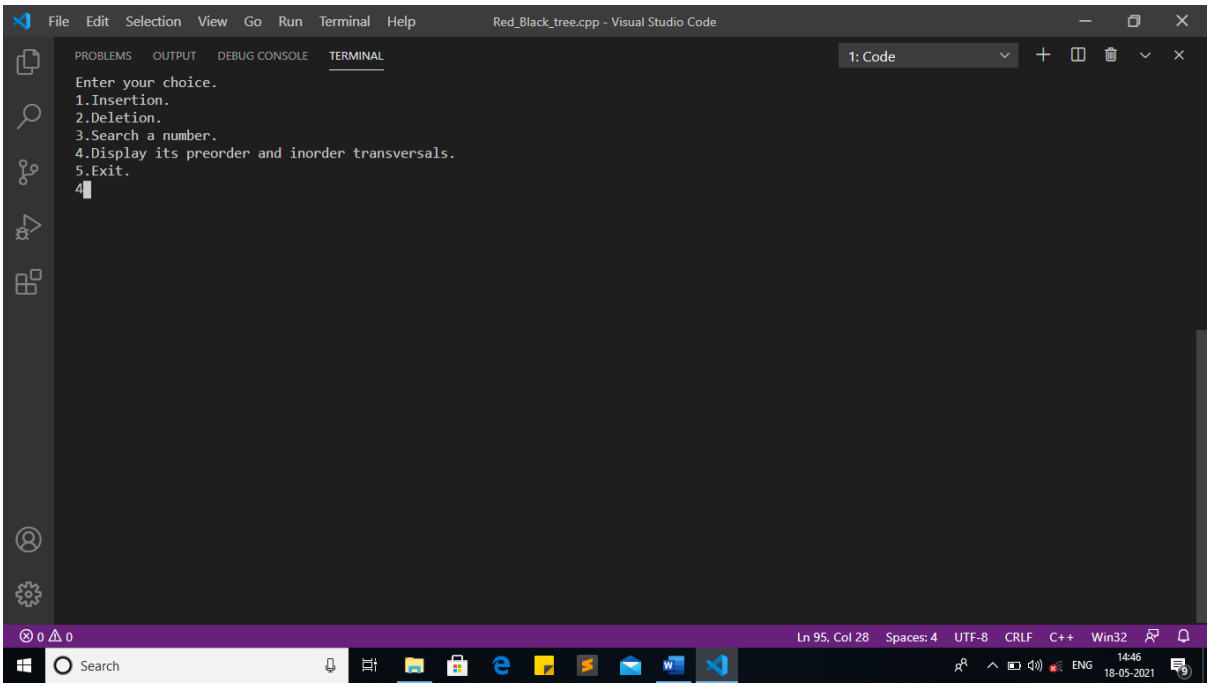
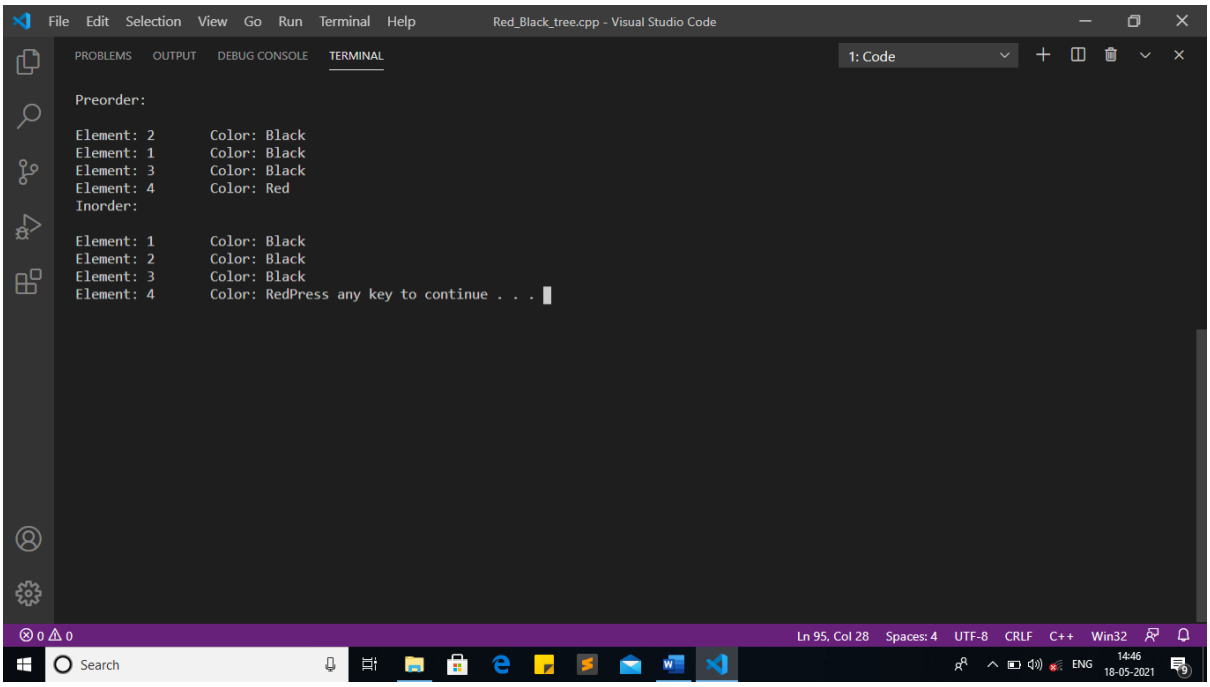
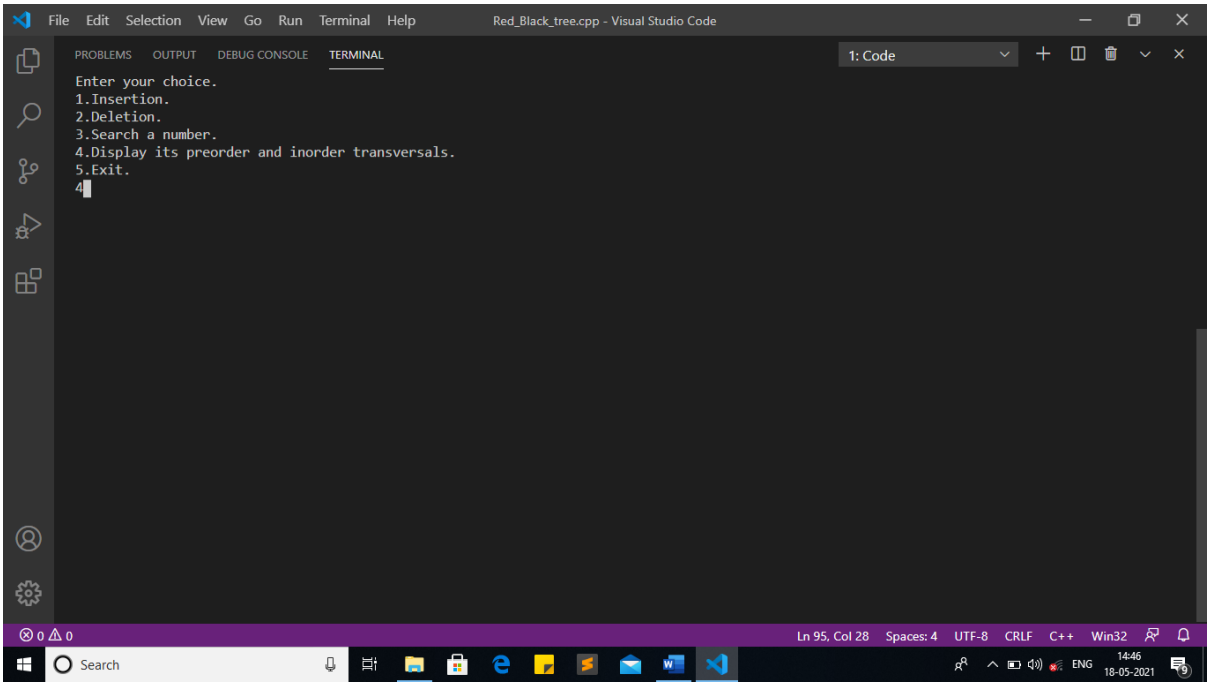
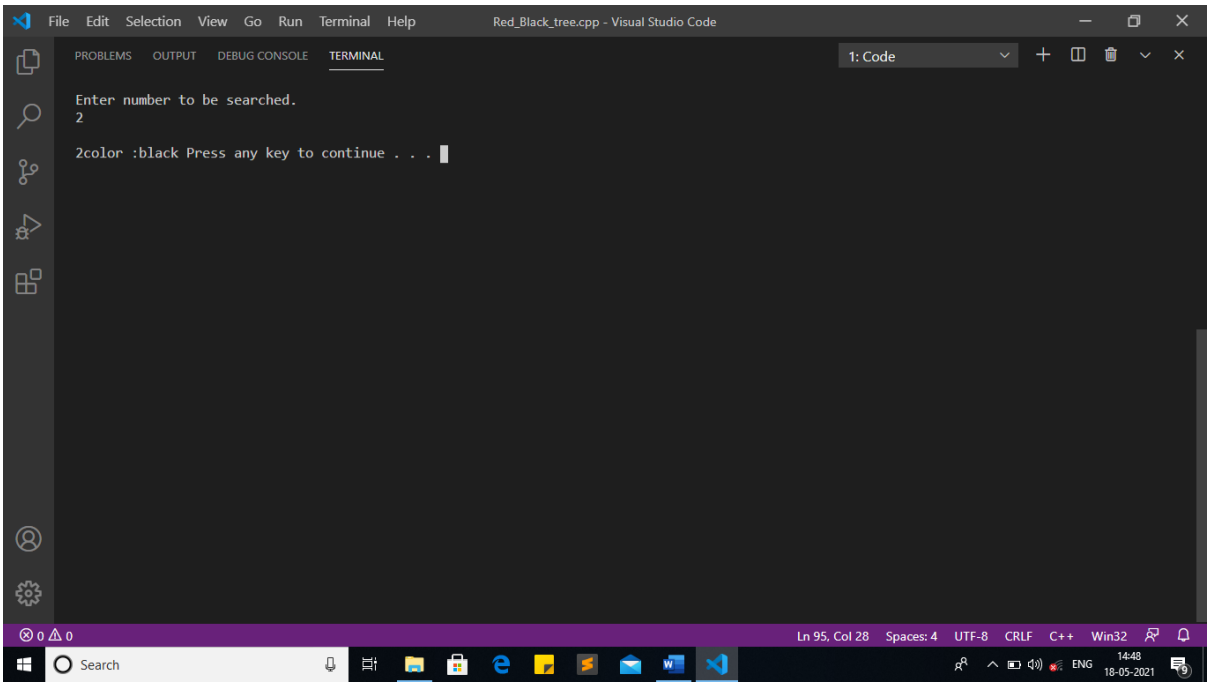
YASHANG SINGH
2019/1453

QUESTION.1

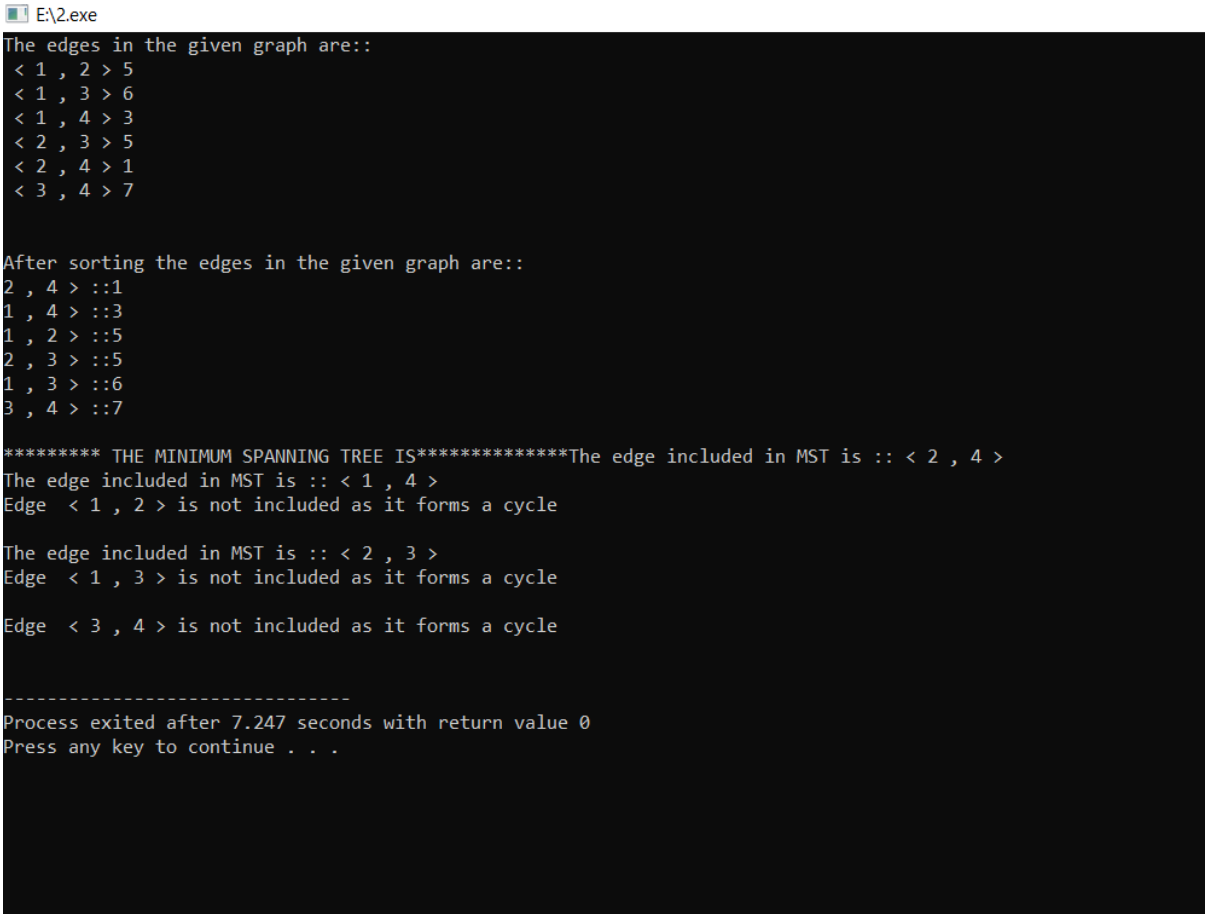



File Edit Selection View Go Run Terminal Help
Red_Black_tree.cpp - Visual Studio Code
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
1: Code
Preorder:
Element: 2 Color: Black
Element: 1 Color: Black
Element: 3 Color: Black
Element: 4 Color: Red
Inorder:
Element: 1 Color: Black
Element: 2 Color: Black
Element: 3 Color: Black
Element: 4 Color: RedPress any key to continue . . .
Ln 95, Col 28 Spaces: 4 UTF-8 CRLF C++ Win32
Search
ENG
14:46
18-05-2021


File Edit Selection View Go Run Terminal Help
Red_Black_tree.cpp - Visual Studio Code
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
1: Code
Enter your choice.
1.Insertion.
2.Deletion.
3.Search a number.
4.Display its preorder and inorder transversals.
5.Exit.
4
Ln 95, Col 28 Spaces: 4 UTF-8 CRLF C++ Win32
Search
ENG
14:46
18-05-2021

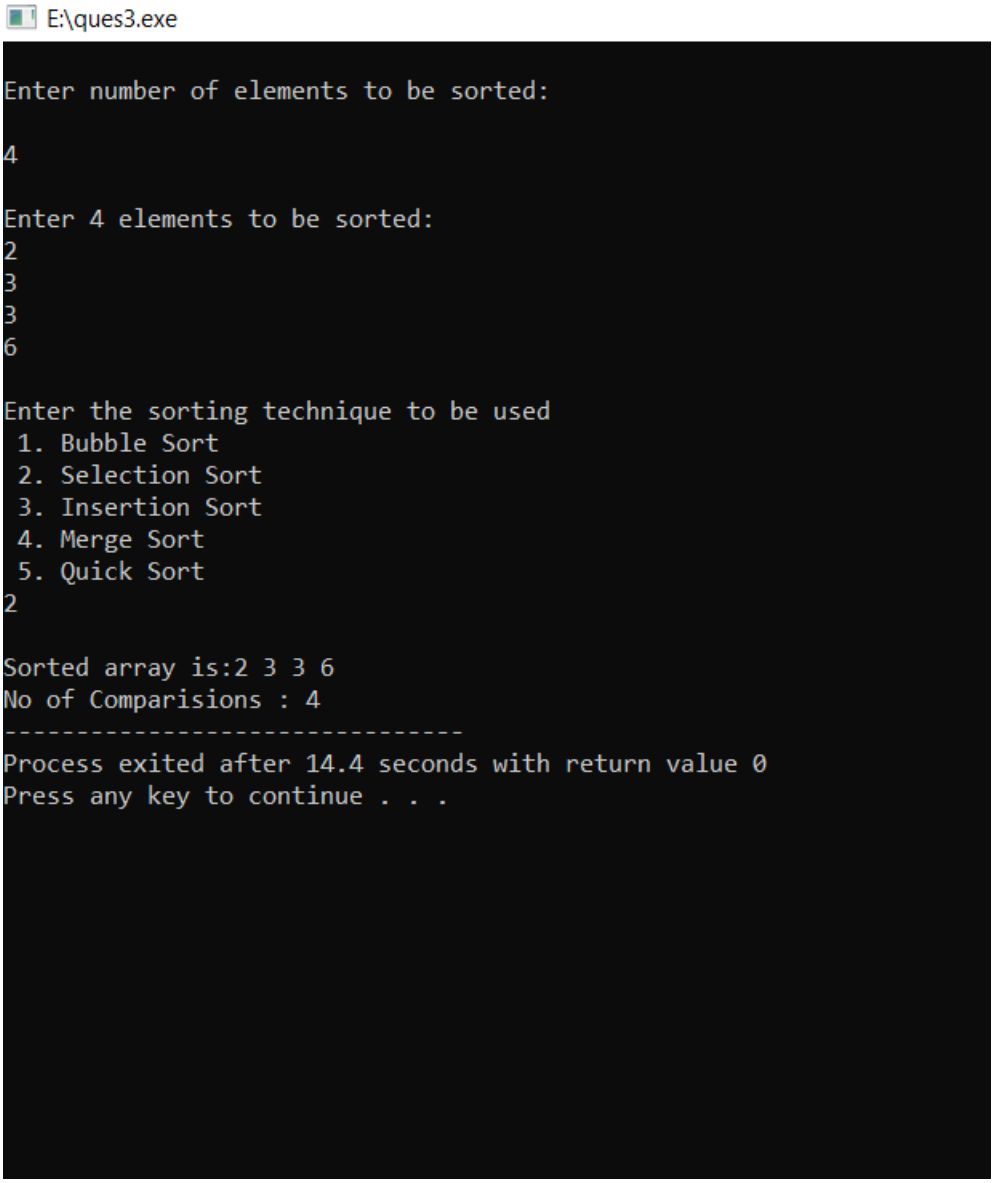

File Edit Selection View Go Run Terminal Help
Red_Black_tree.cpp - Visual Studio Code
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
1: Code
Enter number to be searched.
2
2color :black Press any key to continue . . .
Ln 95, Col 28 Spaces: 4 UTF-8 CRLF C++ Win32
Search
ENG
14:48
18-05-2021

QUESTION 2


E:\2.exe
The edges in the given graph are::
< 1 , 2 > 5
< 1 , 3 > 6
< 1 , 4 > 3
< 2 , 3 > 5
< 2 , 4 > 1
< 3 , 4 > 7
After sorting the edges in the given graph are::
2 , 4 > ::1
1 , 4 > ::3
1 , 2 > ::5
2 , 3 > ::5
1 , 3 > ::6
3 , 4 > ::7
********* THE MINIMUM SPANNING TREE IS**********The edge included in MST is :: < 2 , 4 >
The edge included in MST is :: < 1 , 4 >
Edge < 1 , 2 > is not included as it forms a cycle
The edge included in MST is :: < 2 , 3 >
Edge < 1 , 3 > is not included as it forms a cycle
Edge < 3 , 4 > is not included as it forms a cycle

Process exited after 7.247 seconds with return value 0
Press any key to continue . . .

QUESTION 3.


E:\ques3.exe
Enter number of elements to be sorted:
4
Enter 4 elements to be sorted:
2
3
3
6
Enter the sorting technique to be used
1. Bubble Sort
2. Selection Sort
3. Insertion Sort
4. Merge Sort
5. Quick Sort
2
Sorted array is:2 3 3 6
No of Comparisions : 4
Process exited after 14.4 seconds with return value 0
Press any key to continue . . .