



# **NORTH SOUTH UNIVERSITY**

Department of Electrical and Computer Engineering

## **Assignment – 06**

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Course No. : CSE 225  
Course Title : Data Structures and Algorithm  
Section : 06  
Date : 13 April 2023

**Code:**

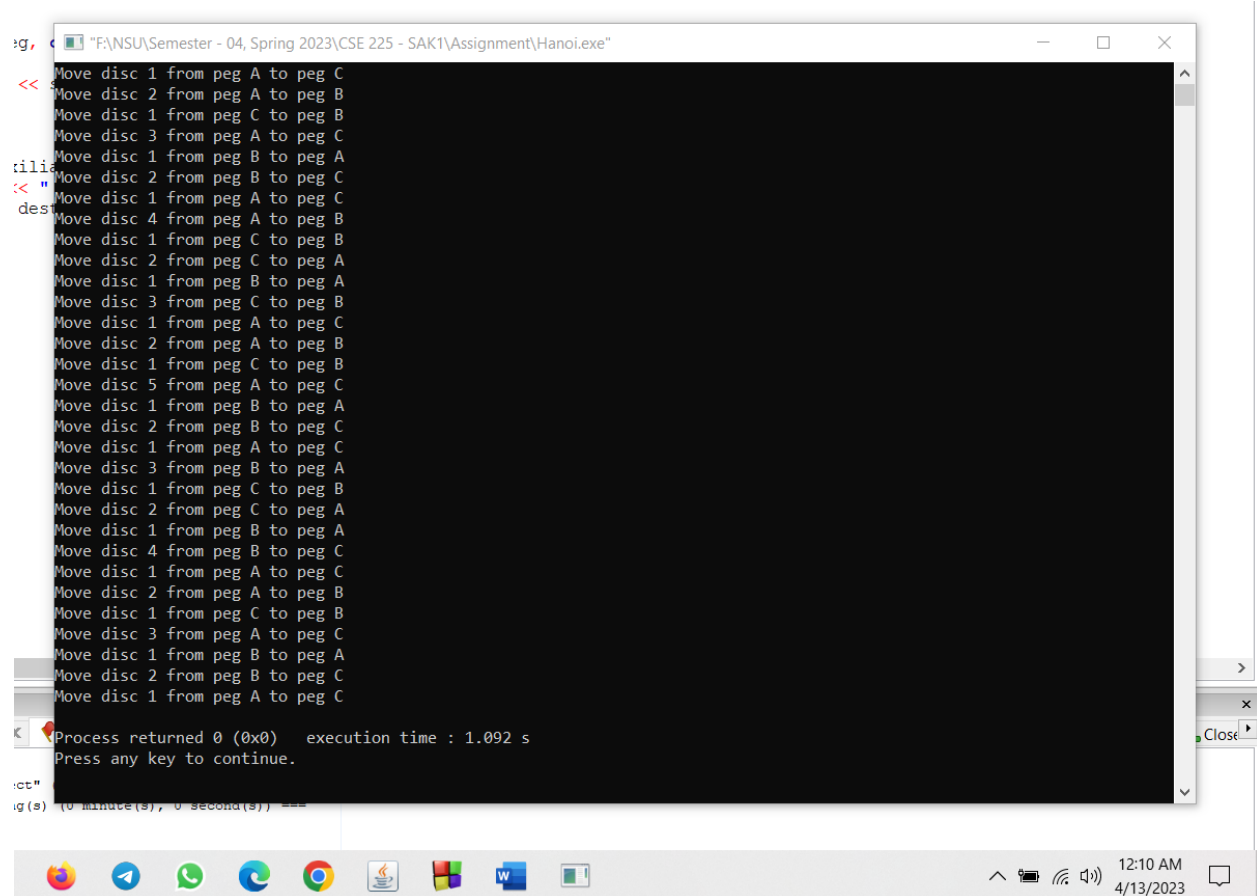
```
#include <iostream>
using namespace std;

void Hanoi(int discNumber, char sourcePeg, char destinationPeg, char
auxiliaryPeg){
    if(discNumber == 1){
        cout << "Move disc 1 from peg " << sourcePeg << " to peg " <<
destinationPeg << endl;
        return;
    }

    Hanoi(discNumber - 1, sourcePeg, auxiliaryPeg, destinationPeg);
    cout << "Move disc " << discNumber << " from peg " << sourcePeg <<
" to peg " << destinationPeg << endl;
    Hanoi(discNumber - 1, auxiliaryPeg, destinationPeg, sourcePeg);
}

int main()
{
    Hanoi(5, 'A', 'C', 'B');
    return 0;
}
```

## Screenshot:



```
g, c "F:\NSU\Semester - 04, Spring 2023\CSE 225 - SAK1\Assignment\Hanoi.exe"
<< Move disc 1 from peg A to peg C
Move disc 2 from peg A to peg B
Move disc 1 from peg C to peg B
Move disc 3 from peg A to peg C
Move disc 1 from peg B to peg A
Move disc 2 from peg B to peg C
Move disc 1 from peg A to peg C
Move disc 4 from peg A to peg B
Move disc 1 from peg C to peg B
Move disc 2 from peg C to peg A
Move disc 1 from peg B to peg A
Move disc 3 from peg C to peg B
Move disc 1 from peg A to peg C
Move disc 2 from peg A to peg B
Move disc 1 from peg C to peg B
Move disc 5 from peg A to peg C
Move disc 1 from peg B to peg A
Move disc 2 from peg B to peg C
Move disc 1 from peg A to peg C
Move disc 3 from peg B to peg A
Move disc 1 from peg C to peg B
Move disc 2 from peg C to peg A
Move disc 1 from peg B to peg A
Move disc 4 from peg B to peg C
Move disc 1 from peg A to peg C
Move disc 2 from peg A to peg B
Move disc 1 from peg C to peg B
Move disc 3 from peg A to peg C
Move disc 1 from peg B to peg A
Move disc 2 from peg B to peg C
Move disc 1 from peg A to peg C
Process returned 0 (0x0)   execution time : 1.092 s
Press any key to continue.
```

12:10 AM  
4/13/2023