

# Lecture 14

Practice



# QUIZ

قَالَ رَبِّ اشْرَحْ لِي صَدْرِي ۝  
﴿٢٥﴾

[فَالَّذِي نَسِيَ كَهُولَ دَسَّهُ مَنْ يَرَى لَيْسَ بِمَنْ يَرَى  
[فَالَّذِي نَسِيَ كَهُولَ دَسَّهُ مَنْ يَرَى لَيْسَ بِمَنْ يَرَى]

وَيَسِّرْ لِي آمْرِي ۝  
﴿٢٦﴾

[وَيَسِّرْ لِي آمْرِي : مَنْ يَرَى لَيْسَ بِمَنْ يَرَى]

وَاحْلُلْ عُقْدَةً مِنْ لِسَانِي ۝  
﴿٢٧﴾

[وَاحْلُلْ لِي آمْرِي : مَنْ يَرَى لَيْسَ بِمَنْ يَرَى]

يَفْقَهُوا قَوْلِي ۝  
﴿٢٨﴾

[يَفْقَهُوا قَوْلِي : مَنْ يَرَى لَيْسَ بِمَنْ يَرَى]

## 4 QUESTIONS / FEEDBACK / CONCERNS



INFORMATION  
TECHNOLOGY  
UNIVERSITY

# SE SECA SLIDE OF FAME

5



NO ONE  
WEEK - 1



Muhammad Daniyal  
Hammad (BSSE23046)  
WEEK - 2



Syed Hashim Abbas  
(BSSE23084)  
WEEK - 3



Umar Ahmad  
(BSSE23032)  
WEEK - 4



Umar Ahmad  
(BSSE23032)  
WEEK - 5



YOUR NAME  
WEEK - 6



YOUR NAME  
WEEK - 7



YOUR NAME  
WEEK - 8



YOUR NAME  
WEEK - 9



YOUR NAME  
WEEK - 10



YOUR NAME  
MIDTERM



YOUR NAME  
WEEK - 11



YOUR NAME  
WEEK - 12



YOUR NAME  
WEEK - 13



YOUR NAME  
WEEK - 14



YOUR NAME  
WEEK - 15

# SE SEC B SLIDE OF FAME

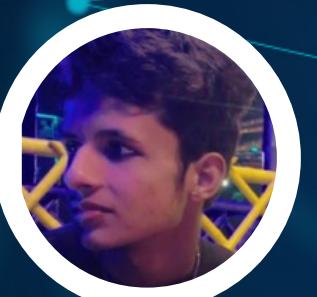
6



Muhammad Mukarram  
BSSE23029  
WEEK - 1



Muhammad Abdullah  
(BSSE23087)  
WEEK - 2



Muhammad Abdullah  
(BSSE23087)  
WEEK - 3



Fasiha Rohail  
(BSSE23041)  
WEEK - 4



Muhammad Abdullah  
(BSSE23087)  
WEEK - 5



YOUR NAME  
WEEK - 6



YOUR NAME  
WEEK - 7



YOUR NAME  
WEEK - 8



YOUR NAME  
WEEK - 9



YOUR NAME  
WEEK - 10



YOUR NAME  
MIDTERM



YOUR NAME  
WEEK - 11



YOUR NAME  
WEEK - 12



YOUR NAME  
WEEK - 13



YOUR NAME  
WEEK - 14



YOUR NAME  
WEEK - 15

# RECAP

GitHub

Tools (Cygwin, IDE, GitHub)

Approach towards a word problem

Flowcharts

Flowcharts Advantages & Disadvantages

Algorithms

Pseudocode

Numbers Systems (Decimal, Binary, Octal & Hexadecimal)

Ten's Complement

Twos Complement

main function

Stream in and stream out operators

if else

Functions

Data Types

Arithmetic Operators

Relational Operators

Loops (While, for , do while)

Nested Loops

Switch cases

# RECAP

Function Overloading

Scope of variables

Function Prototype and Definition

Default Value in parameters of functions

Parameters by value vs Parameters by Reference

Recursion

Arrays

2D Arrays

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

void main()
{
    char cmatrix [5][15];
    for (int q1=0 ; q1<5 ; q1++)
    {
        cout<<"Enter name :";
        cin>>cmatrix [q1];

    }
    cout<<endl;

    cout<<"Your Entered Names are :";

    for (int q1=0 ; q1<5 ; q1++)
    {
        cout<<cmatrix [q1]<<endl;
    }
    getch();
}
```

# TASK 1

Write a menu driven C++ program to do following operation on two dimensional array A of size  $m \times n$ . You should use user-defined functions which accept 2-D array A, and its size m and n as arguments.

- To input elements into matrix of size  $m \times n$
- To display elements of matrix of size  $m \times n$
- Sum of all elements of matrix of size  $m \times n$
- To display row-wise sum of matrix of size  $m \times n$
- To display column-wise sum of matrix of size  $m \times n$
- To create transpose of matrix B of size  $n \times m$

Where both m and n can be 5