<u>**AIM:**</u> **To learn about arrays & strings in C++.**

1. Follow the given details for inquiries about student data.
   The program will display a menu that enables the users to choose whether they want to view all students 'records or view only the records of a specific student by the student's id. See sample below.

MENU

   1. View all students' records
   2. View a student's records by ID
   3. Show the highest and the lowest final scores
Please enter your choice: 1

```
|StudentID | Quiz1 | Quiz2 | Mid-Term | Final
| ================================================
|1232        | 10   | 23   | 45        | 56   |
|2343        | 45   | 43   | 24        | 78   |
|2343        | 34   | 45   | 45        | 45   |
|3423        | 67   | 6    | 65        | 56   |
```

   Note: These records will be stored in a two-dimensional array

2.   In this **C++ exercise**, your are about to display a matrix as shown below. The diagonal of the matrix fills with 0. The lower side fills will -1s and the upper side fills with 1s.

```
0  1  1  1  1
-1 0  1  1  1
-1 -1 0  1  1
-1 -1 -1 0  1
-1 -1 -1 -1 0
```

3. Me trying to write a program that change every letter in a given string with the letter following it in the alphabet (ie. a becomes b, p becomes q, z becomes a).
Example:
Sample Input: w3resource
Sample Output: x3sftpvsdf

Post Practical Work:

1. Find how many times and in which year an entered birth Day has same day within a span of 100 years?
Example:
Input
Enter Your Birthday: 23- 7 -1998
OutPut
Your Birthday was on Friday and will be repeated 7 times
2007, 2022, 2036, 2059, 2071,2083, 2091.

2. Write the output of the following program. Assume that all necessary header files are included.

```
void Encrypt(char T[])

{

    for (int i = 0; T[i] != '\0'; i += 2)

        if (T[i] == 'A' || T[i] == 'E')

            T[i] = '#';

        else if (islower(T[i]))

            T[i] = toupper(T[i]);

        else

            T[i] = '@';

}

int main()

{

    char text[]="SaVE EArtH";

    Encrypt(text);

    cout << text << endl;
```

```
    return 0;

}
```

3. include<iostream>
using namespace std;
void main()
```
{
    int num[]={1,2,3,4,5,6};
    num[1]==[1]num ? cout<<"Success" : cout<<"Error";
}
```

4. Implement a program to insert a dash character (-) between two odd numbers in a given string of numbers.
Example:
Sample Input: 1345789
Sample Output: Result-> 1-345-789

5.
Find errors, if any, in the following function definition for displaying a matrix: void display(int A[][], int m, int n)

```
{
  for(1=0; i<m; i++)
  for(j=o; j<n; j++)
   cout<<" "<<A[i][j];
   cout<<"\n";
}
```