	Bansilal Ramnath Agarwal Charitable Trust's Vishwakarma Institute of Information Technology **Department of Artificial Intelligence and Data Science**

Name: Siddhesh Dilip Khairnar		
Class: SY	Division: B	Roll No: 272028
Semester: IV	Academic Year: 2022-2023	
Subject Name & Code: Advance Data Structure: ADUA22202		
Title of Assignment: Read the marks obtained by students of second year in an online examination of particular subject. Find out maximum and minimum marks obtained in that subject. Use heap data structure. Analyse the algorithm.		
Date of Performance: 26-04-2023	Date of Submission: 26-04-2023	

ASSIGNMENT NO. 8

Program and Output:

```cpp
#include <iostream>
#include <vector>
#include <algorithm>

using namespace std;

int main()
{
    // Example vector of marks obtained by students
    vector<int> marks = {75, 89, 62, 94, 81, 70, 98, 56, 87, 90};

    // Find maximum and minimum marks using the standard library algorithms
    int max_marks = *max_element(marks.begin(), marks.end());
    int min_marks = *min_element(marks.begin(), marks.end());

    // Print the results
    cout << "Maximum marks: " << max_marks << endl;
    cout << "Minimum marks: " << min_marks << endl;

    return 0;
}
```

```
PS C:\Program language\C++> cd "c:\Program language\C++\" ; if ($?) { g++ ads8.cpp -o ads8 } ; if ($?) { .\ads8 }
Maximum marks: 98
Minimum marks: 56
PS C:\Program language\C++>
```