

AI Lab Assignment 06

Problem Statement: *fuzzySet*

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CLASS: TY(IT)

ROLLNO: **29**

BATCH: **02**

```
#include<bits/stdc++.h>
using namespace std;
int main()
{
    vector<double> nums={1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16};
    double parameter=0.6;

    for(auto it : nums)
    {
        double ans= abs((10 - it) / max(int(it), 10)) * parameter ;

        if (ans == 0)
            cout<< it <<"-->"<< 1<<endl;
        else if (ans > 1)
            cout<< it <<"-->"<< 0<<endl;
        else
            cout<< it <<"--->"<< 1 - ans<<endl;

    }
}
```

Output:

```
PS C:\Users\Dell\OneDrive\Desktop\VS Code\AI Lab> cd "C:\Users\Dell\OneDrive\Desktop\VS Code\AI Lab\" ; if ($?) { g++ Lab6.cpp -o Lab6 } ; if ($?) { .\Lab6 }
1--->0.46
2--->0.52
3--->0.58
4--->0.64
5--->0.7
6--->0.76
7--->0.82
8--->0.88
9--->0.94
10-->1
11--->0.945455
12--->0.9
13--->0.861538
14--->0.828571
15--->0.8
16--->0.775
PS C:\Users\Dell\OneDrive\Desktop\VS Code\AI Lab>
```

```
File Edit Selection View Go Run Terminal Help Lab6.cpp - AI Lab - Visual Studio Code
C++ Lab6.cpp x
C++ Lab6.cpp > main()
1 #include<bits/stdc++.h>
2 using namespace std;
3 int main()
4 {
5     vector<double> nums={1,2,3,4,5,6,7,8,9,10,11,12,13,14,15};
6     double parameter=0.6;
7
8     for(auto it : nums)
9     {
10         double ans= abs((10 - it) / max(int(it), 10)) * parameter;
11
12         if (ans == 0)
13             cout<< it <<"-->"<< 1<<endl;
14         else if (ans > 1)
15             cout<< it <<"-->"<< 0<<endl;
16         else
17             cout<< it <<"-->"<< 1 - ans<<endl;
18     }
19 }
20
21
22
23
Windows PowerShell
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Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows

PS C:\Users\Dell\OneDrive\Desktop\VS Code\AI Lab> cd "c:\Users\Dell\OneDrive\Desktop\VS Code\AI Lab\" ; if ($?) { g++ Lab6.cpp -o Lab6 } ; if ($?) { .\Lab6 }
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```