

1}

Code a program to formulate a membership function for a fuzzy set having values defining "tall" with a triangular shape. The membership value should indicate : 0 at 165cm, 1 at 180cm, and 0 again at 195cm.

OUTPUT:

```
PS C:\Users\hp\Desktop\Nikhil Wakode\AI_Lab\Nikhil_Wakode> cd "C:\Users\hp\Desktop\Nikhil Wakode\AI_Lab\Nikhil_Wakode"
PS C:\Users\hp\Desktop\Nikhil Wakode\AI_Lab\Nikhil_Wakode> cd "c:\Users\hp\Desktop\Nikhil Wakode\AI_Lab\Nikhil_Wakode\" ; if ($?) {
    g++ fuzzy_logic_1.cpp -o fuzzy_logic_1 } ; if ($?) { .\fuzzy_logic_1 }
Height: 165 cm, Membership value: 0
○ Height: 180 cm, Membership value: 1
Height: 195 cm, Membership value: 0
PS C:\Users\hp\Desktop\Nikhil Wakode\AI_Lab\Nikhil_Wakode>
```

2}

OUTPUT:

```
PS C:\Users\hp\Desktop\Nikhil Wakode\AI_Lab\Nikhil_Wakode> cd "C:\Users\hp\Desktop\Nikhil Wakode\AI_Lab\Nikhil_Wakode"
PS C:\Users\hp\Desktop\Nikhil Wakode\AI_Lab\Nikhil_Wakode> cd "c:\Users\hp\Desktop\Nikhil Wakode\AI_Lab\Nikhil_Wakode\" ; if ($?) { g++ fuzzy_logic_2.cpp -c
fuzzy_logic_2 } ; if ($?) { .\fuzzy_logic_2 }
○ Temperature Membership Value
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22.0C: 0.0000
27.0C: 0.5000
32.0C: 1.0000

Key Points:
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22.0C: 0.0000
27.0C: 0.5000
32.0C: 1.0000
37.0C: 1.0000
PS C:\Users\hp\Desktop\Nikhil Wakode\AI_Lab\Nikhil_Wakode>
```