```cpp
#include <iostream>

using namespace std;

float f(float t, float y)
{
    //return y - (t*t) + 1;
    return -2*t*t*t + 12*t*t -20*t +8.5;
}

float euler(float a, float b, float N, float yi)
{
    float h = (b-a)/N;
    cout<<"y0 = "<<yi<<endl;
    for(int i=0; i<N; i++)
    {
        yi = yi + (h*f(i*h, yi));
        cout<<"y"<<i+1<<" = "<<yi<<endl;
    }
}

int main()
{
    float a = 0, b = 4, N = 8, y0 = 1;
    //float a = 0, b = 2, N = 10, y0 = 0.5;
    euler(a, b, N, y0);
}
```

```
; if ($?) { g++ Euler.cpp -o Euler } ; if
($?) { .\Euler }
y0 = 1
y1 = 5.25
y2 = 5.875
y3 = 5.125
y4 = 4.5
y5 = 4.75
y6 = 5.875
y7 = 7.125
y8 = 7
PS C:\Users\luisa\OneDrive - up.edu.mx\Docu
```