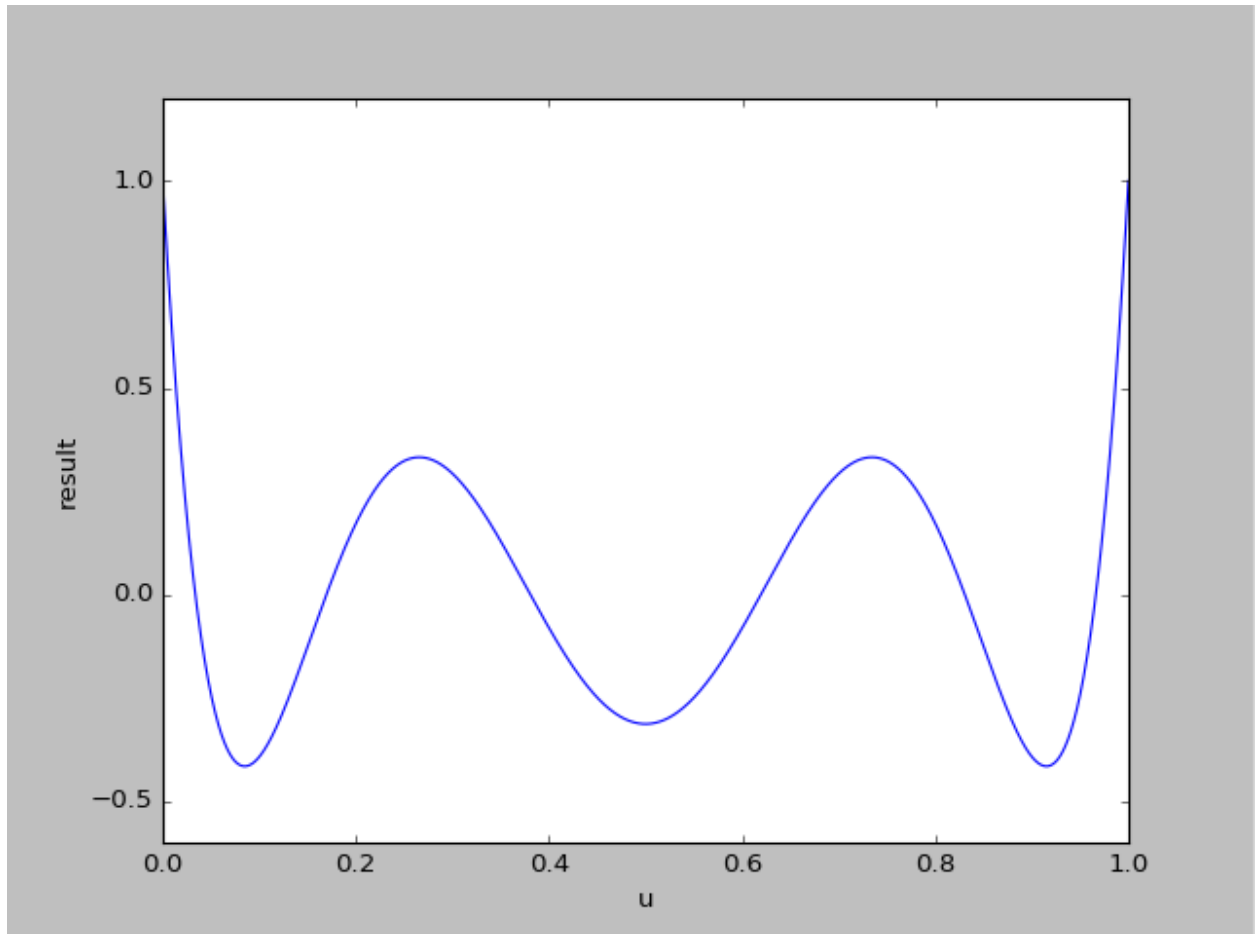


Problem 4:



A) This is the graph that was plotted.

B)

```
C:\Users\lab\Dropbox\Computational Physics\Computational-Physics-Python\Jinesh_H  
w4>python -i Prob4.py  
>>> roots(0)  
0.0337652428984  
>>> roots(0.2)  
0.169395306767  
>>> roots(0.3)  
0.380690406958  
>>> roots(0.6)  
0.619309593042  
>>> roots(0.8)  
0.830604693233  
>>> roots(0.9)  
0.966234757102  
>>>
```

After determining and inspecting by eye, I plugged in roughly where the roots were, and it returned a much better approximation. The roots are at  $x = 0.0337, 0.169, 0.381, 0.619, 0.831,$  and  $0.966$ .