

Lab2 Question 2a Printed Output

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-----Q2a i-----

D(4), Trapezoidal rule: 0.26224782053479523

D(4), Simpsons rule: 0.1826909645971217

D(4), Scipy special function: 0.1293480012360051

Difference between Trapezoidal rule & Scipy special function: 0.13289981929879013

Difference between Simpsons rule & Scipy special function: 0.0533429633611166

-----Q2a ii-----

Average Time consumption, Trapezoidal method, n=17: 0.14487245082855224 s

Average Time consumption, Simpsons method, n=10: 0.0013559484481811524 s

Average Time consumption, scipy.special.dawns: 0.0 s

-----Q2a iii-----

Error of Trapezoidal method, N1=32 N2=64: 0.0025465686529556795

Error of Simpsons method, N1=32 N2=64: 4.115768458675488e-05
