**Numerical computation – Assignment 10**

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Q1.

which is nonequivalence. Apply the composite Trapezoid Rule for :

When

And the true value is: .

When

And the true value is: .

When

And the true value is: .

Q2.

Apply the composite Trapezoid Rule for with equal subintervals:

When ,

When , .

and

Q3.

When

When

Q4.

Using the Trapezoidal Rule, when

When :

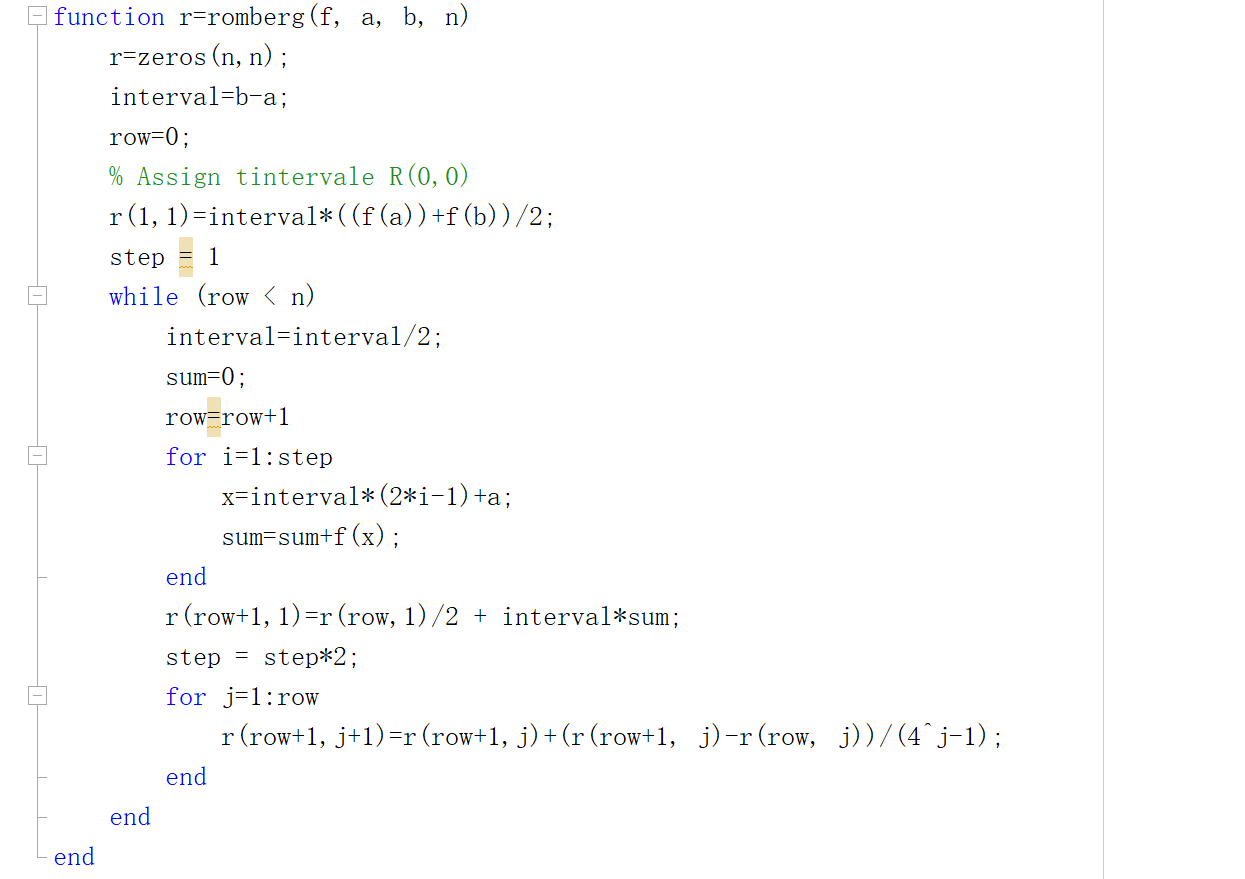
When :

Using Simpson’s Rule, when we have

The most accurate value of is .

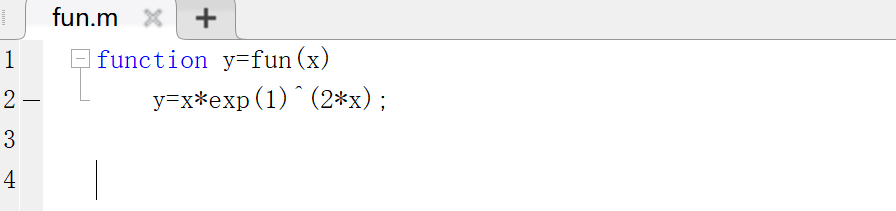
Q5.

The function code is:



Then we can get the result like this:

Function



Result table

