Example(11): Use the two-point Gauss-Legendre rule to approximate the following integral

$$\int_0^2 e^{x^2} dx$$

```
% Gauss Legendre Integration of two points
clc; clear;
f=@(x)exp(x^2);
a=input('a=');
b=input('b=');
a0=(b+a)/2;
a1=(b-a)/2;
x0=a0+(a1*-1/sqrt(3));
x1=a0+(a1*1/sqrt(3));
I=a1*(f(x0)+f(x1))
% If a=0, b=2, result=13.2332
```