

Midpoint Method

```
function fx=f(x)
fx=exp(x);
```

```
function s=midpoint_integral(f,a,b,n)
% a function to find the integral of the function
%[f(x)] from [a] up to [b] with [n] subintervals.
clc
a=0;
b=2;
n=8;
h=(b-a)/n;
startmidpoint=a+0.5*h;
endmidpoint=b-0.5*h;
s=0;
for x=[startmidpoint:h:endmidpoint]
s=s+feval('f',x)*h;
end

% ans =6.3724
```