```
% Pawan Raju Baisane
% TY A Mechanical :03
% simpson 1/3 rd rule
clc ;
clear all;
close all;
f=input('define a function (fx)');
x0=input('write the value of
x0:'); xn=input('write the value
of xn:'); n=input('Enter the value
of n:'); h=(xn-x0)/n;
area1=0;
area2=0;
for i=1:n-
1;
if (mod(i,2)~=0)
area1=f(x0+i*h)+area1
; else
area2=f(x0+i*h)+area2
; end
end
ans=(h/3)*((f(x0)+f(xn))+4*area1+2*area2);
fprintf('\n value of intergration is %f',ans);
```

Output:

```
define a function (fx)
   @ (x)((exp(x))/x)
write the value of x0:
  1
write the value of xn:
  3
Enter the value of n:
  6

value of intergration is 8.039213
  quadv(f,1,3)

ans =

8.0387
```