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%Name= Mokshada Toke
%Class& Div= T.Y-B (72)
%Simpsons 1/3 rd Method
f = input('\n Enter Function y = f(x) ');
xo = input('\n Enter the value of xo : ');
xn = input('\n Enter the value of xn : ');
n = input('\n Enter the value of n : ');
while(mod(n,2)~=0)
    n = input('\ Enter the value of n again');
end
h = (xn-xo)/n;
ans = 0;
for i = 1:n-1
    if(mod(i,2)~=0)
        ans = ans+4*(f(xo+i*h));
    else
        ans = ans+2*(f(xo+i*h));
    end
end
ans1 = f(xo)+f(xn);
area = ans+ans1;
area = area*(h/3);
fprintf('\n Total area = %f',area);

```

OUTPUT

Enter Function y = f(x)

@(x) (exp(x))

Enter the value of xo : 0

Enter the value of xn : 4

Enter the value of n : 4 , Total area = 53.863846

