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# Integration using Simpson's 3/8 rule

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```
function I = s38_r(f, a, b, N)
```

```
h = (b-a)/N;  
I = f(a)+f(b);
```

```
for i = 1:N-1
```

```
    if rem(i,3)==0  
        I = I+2*f(i*h);  
    else  
        I = I+3*f(i*h);  
    end
```

```
end
```

```
I = (b-a)*I*3/(8*N);
```

```
end
```

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