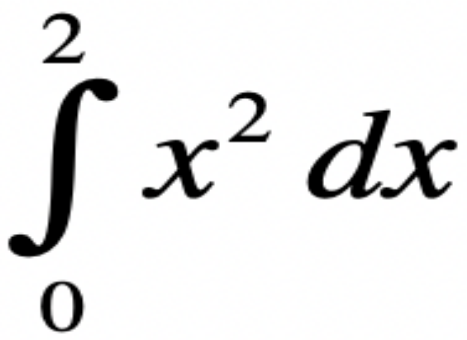

A1. The correct answer is 2.666666..7
A2. Intervals used to get a decent answer: With **N=500**, the error rate dropped below 10^-4

Test Results:

```
-bash-4.1$ make -s
 Please input the upper limit of the integration:
2
 Please input the lower limit of the integration:
0
 Please input the number of intervals N for the integration:
5


 Given inputs values are:
 a-   0.0000000
 b-   2.0000000
 N-           5


 Integral is:   2.7200003
```

```
-bash-4.1$ make -s
 Please input the upper limit of the integration:
2
 Please input the lower limit of the integration:
0
 Please input the number of intervals N for the integration:
10


 Given inputs values are:
 a-   0.0000000
 b-   2.0000000
 N-          10


 Integral is:   2.6800001
```

```
-bash-4.1$ make -s
 Please input the upper limit of the integration:
2
 Please input the lower limit of the integration:
0
 Please input the number of intervals N for the integration:
50


 Given inputs values are:
 a-   0.0000000
 b-   2.0000000
 N-          50


 Integral is:   2.6671999
```

```
-bash-4.1$ make -s
 Please input the upper limit of the integration:
2
 Please input the lower limit of the integration:
0
 Please input the number of intervals N for the integration:
100


 Given inputs values are:
 a-   0.0000000
 b-   2.0000000
 N-         100


 Integral is:   2.6668000
```

```
-bash-4.1$ make -s
 Please input the upper limit of the integration:
2
 Please input the lower limit of the integration:
0
 Please input the number of intervals N for the integration:
500


 Given inputs values are:
 a-   0.0000000
 b-   2.0000000
 N-         500


 Integral is:   2.6666729
```

```
-bash-4.1$ make -s
 Please input the upper limit of the integration:
2
 Please input the lower limit of the integration:
0
 Please input the number of intervals N for the integration:
1000


 Given inputs values are:
 a-   0.0000000
 b-   2.0000000
 N-        1000


 Integral is:   2.6666675
```

```
-bash-4.1$ make -s
 Please input the upper limit of the integration:
2
 Please input the lower limit of the integration:
0
 Please input the number of intervals N for the integration:
2000


 Given inputs values are:
 a-   0.0000000
 b-   2.0000000
 N-        2000


 Integral is:   2.6666665
```

Test Results on:

$$\int_0^{\pi} \sin(x)\,dx$$

A1. The correct answer is: 2
A2. Intervals used to get a decent answer: With **N=1998**, the error rate dropped as low as 10^-9

Test Results:

```
-bash-4.1$ make -s
 The upper limit of the integration is:
   3.1415927
 Please input the lower limit of the integration:
0
 Please input the number of intervals N for the integration:
10


 Given inputs values are:
 a-   0.0000000
 b-   3.1415927
 N-          10


 Integral is:   1.9835235
```

```
-bash-4.1$ make -s
 The upper limit of the integration is:
   3.1415927
 Please input the lower limit of the integration:
0
 Please input the number of intervals N for the integration:
50


 Given inputs values are:
 a-   0.0000000
 b-   3.1415927
 N-          50


 Integral is:   1.9993421
```

```
-bash-4.1$ make -s
 The upper limit of the integration is:
   3.1415927
 Please input the lower limit of the integration:
0
 Please input the number of intervals N for the integration:
100


 Given inputs values are:
 a-   0.0000000
 b-   3.1415927
 N-         100


 Integral is:   1.9998356
```

```
-bash-4.1$ make -s
 The upper limit of the integration is:
   3.1415927
 Please input the lower limit of the integration:
0
 Please input the number of intervals N for the integration:
500


 Given inputs values are:
 a-   0.0000000
 b-   3.1415927
 N-         500


 Integral is:   1.9999937
```

```
-bash-4.1$ make -s
 The upper limit of the integration is:
   3.1415927
 Please input the lower limit of the integration:
0
 Please input the number of intervals N for the integration:
1000


 Given inputs values are:
 a-   0.0000000
 b-   3.1415927
 N-        1000


 Integral is:   1.9999986
```

```
-bash-4.1$ make -s
 The upper limit of the integration is:
   3.1415927
 Please input the lower limit of the integration:
0
 Please input the number of intervals N for the integration:
2000


 Given inputs values are:
 a-   0.0000000
 b-   3.1415927
 N-        2000


 Integral is:   2.0000007
```

```
-bash-4.1$ make -s
 The upper limit of the integration is:
   3.1415927
 Please input the lower limit of the integration:
0
 Please input the number of intervals N for the integration:
1998


 Given inputs values are:
 a-   0.0000000
 b-   3.1415927
 N-        1998


 Integral is:   1.9999999
```