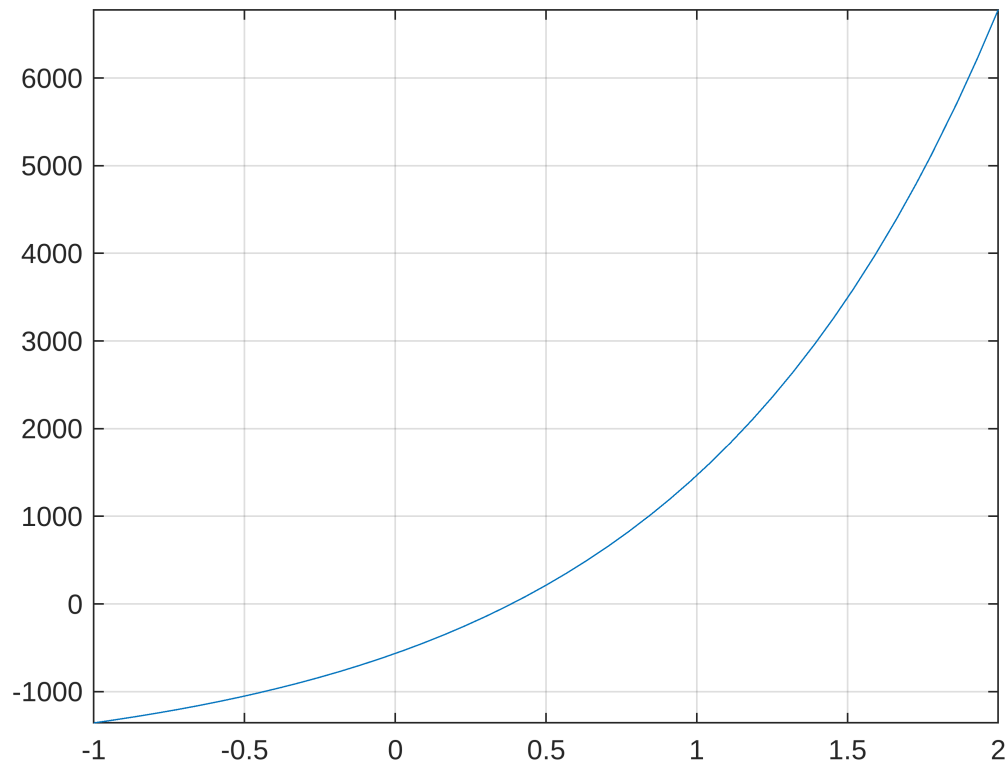


```
syms lambda
N(lambda) = 1000*exp(lambda)+435/lambda*(exp(lambda)-1);
Ec(lambda)=N-2000
```

```
Ec(lambda) =
```

$$1000 e^{\lambda} + \frac{435 (e^{\lambda} - 1)}{\lambda} - 2000$$

```
fplot(Ec);
grid on
xlim([-1 2])
```



```
%Entrada
x0 = -0.5;
x1=1;
errort=1e-5
```

```
errort =
1.0000e-05
```

```
Ec(x0)*Ec(x1)
```

```
ans =
```

$$\left(130 e^{-\frac{1}{2}} - 1130\right) (1435 e - 2435)$$

```

%Primer paso
for i = 1:n
x2=(x0+x1)/2
%Segundo paso
if Ec(x0)*Ec(x2)<0
    x0 = x0;
    x1 = x2;
else
    x0 = x2
    x1 = x1;
end
error = abs(x0 - x1);
if error < errort
    break
end
end

```

```

x2 =
0.2500
x0 =
0.2500
x2 =
0.6250
x2 =
0.4375
x2 =
0.3438
x0 =
0.3438
x2 =
0.3906

```

```
x1
```

```

x1 =
0.3906

```

```
x2
```

```

x2 =
0.3906

```

```
x0
```

```

x0 =
0.3438

```