# Stochastic Processes 160B

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## Part A

Running the program produced this text, one random sample of three exponential variables:

```
Our three random exponential values are  0.5634070941048008 ,  1.6297961128933705 ,
and  0.2705648852282262 .

The largest is  1.6297961128933705 .
```

## Part B

Then the program printed this, the estimations of the given values by Monte Carlo simulation:

```
In our simulation, the probability the three variables were in ascending order was  0.157 .

Given X_1 and X_2 were in order, the expected minimum value was  0.35602518414375656 .

Given X_1 and X_2 were in order, the expected maximum value was  1.8779816888362886 .

Given all variables were in order, the expected maximum value was  1.854747923907357 .

Given all variables were in order, the expected minimum value was  0.36615766163017344 .
```