## Discussion 2

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## ${\bf Question:}$

In this discussion, you are asked to find the maximal differential entropy of bounded random variable. That is, find the value of

$$\max_{\mathsf{P}_X:\mathsf{Pr}\{X\in[a,b]\}=1}h(X)$$

and the achieved distribution  $\mathsf{P}_X^*$ .