Assignment 1
AI1110: Probability and Random Variables
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11.16.3.10: A letter is chosen at random from the word 'ASSASSINATION'.Find the probability that letter is (1)a vowel (2)a consonant.
Solution: Given word is 'ASSASSINATION'
vowels in the given word are big[A,A,I,A,I,O]
consonents in the given word are big[S,S,S,S,N,T,N]

(a) let X denote the letter is vowel then probability of letter is vowel

$$\Pr(X) = \frac{6}{13} \quad (1)$$

(b) let Y denote the letter is consonent then probability of letter is consonent

$$\Pr(X) = \frac{7}{13} \quad (2)$$