

# Assignment

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Question 11.16.3.36 State whether the statement is true or false

The sum of probabilities of two students getting distinction in their final examination is 1.2

**Solution:** from Table 1

random variable	values	events
X	0	Person 1 getting distinction
	1	Person 2 getting distinction

TABLE 1: Random variable table

$$\Pr(X = 0) \leq 1 \quad (1)$$

$$\Pr(X = 1) \leq 1 \quad (2)$$

$$\Pr(X = 0) + \Pr(X = 1) \leq 2 \quad (3)$$

since the given value satisfies the condition, It is True