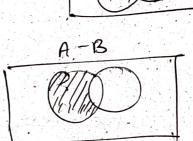
Take an equation -> x + y= 1 1+cx, > 2 & y are normal variables. Random variables are different from these Random variable is a process of mapping the output of a random process or exporiment to a number. eg -> Tossing a coin. This is a random process as coe get. Hor or T · Rolling a dice £ 1,2,3,4,5,6. · measure tonp for next day. These all are random processes Pandom var X = [0 it H] Hence, it quantifies a random variable **Y = [sum of rolling of dice 7 times] Hence, random variable can take any value depending upon putcome of the random process: cohereas, Normal Variables have fix value.	Random Variables!
Random variables are difficult from these Random variables are difficult from these Random variable is a process of mapping the output of a random process or experiment to a number eg - Tossing a coin. This is a rondom process as use get H or T . Rolling a dice [1,2,3,4,5,6]. Measure tomp for next day. These all are random processes Random var X = [0 if H] If T] Hence, it quantifies a random variable 2 Y = [sum of rolling of dice 7 times] Hence, random variable can take any value depending upon puttome of the random process cohereas, Normal variables have	
Random variables are difficult from these Random variables are difficult from these Random variable is a process of mapping the output of a random process or experiment to a number eg - Tozsing a coin. This is a rondom process as use get H or T . Rolling a dice [1,2,3,4,5,6]. Measure top for next day. These all are random processes Random var X = [0 it H] It if T] Hence, it quantifies a random variable 2 Y = [sum of rolling of dice 7 tires] Itunce, random variable can take any value depending upon putcome of the random process whereas, Normal variables have	Take an equation - > x+3=2
Random variable is a process of mapping the output of a random process or exporiment to a number to a number eg -> Tossing a coin. This is a random process as use get (f) or (f) Rolling a dice & 1,2,3,4,5,6. Measure temp for pext day. These all are random processes Random var X = [0 :+ H] It if T] Hence, it quantifies a random variable **Y = [sum of rolling of dice = times] Hence, random variable can take any value depending upon putcome of the random process cohereas, Normal variables have	Random vaniables are different from these
· Rolling a dice £ 1,2,3,4,5,63. · measure temp for peat day. These all are random processes Random var X = 50 if H3 Lt if T] Hence, it quantifies a random variable 2 Y = [sum of rolling of dice 7 times] Hence, random variable can take any value depending upon putcome of the random process: cohereas, Normal Variables have	Random variable is a process of mapping the output of a random process or experiment
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These all are random processes. Random var $X = \int_{-\infty}^{\infty} 0$ if H? Hence, it quantifies a random variable 2 $Y = \int_{-\infty}^{\infty} \int_{-$	· Rolling a dice & 1,2,3,4,5,63.
Hence, it quantifies a random variable 2 Y = {sum of rolling of dice 7 times} Hence, random variable can take any value depending upon putcome of the random process cohereas, Normal Variables have	These all are rondom processes.
Huce, random variable can take any value depending upon putcome of the random process cohereas, Normal Variables have	Pandom vas X = 50 :+ H}
Hence, random variable can take any value depending upon putcome of the random process cohereas, Normal Variables hake	그 이 글로, 전 달리 방리이를 하고 통화 발표함 맞고 하는 방법을 받는 하고 하는데 말이 같다.
depending upon putcome of the random process cohereas, Normal Variables have	Z Y = { sum of rolling of dice 7 times }
process cohereas, Normal Variables hake	depending upon patrome of the random
tix value.	process cohereas, Normal Variables have
	tire value.

denoted by CAPITAL LETTER.



Covariance and Correlation: Erclat between X and Y? XIXI XYY XY LT XT LT Correlation is nothing but relationship beto Covariance (X, Y). $\leq \leq (\chi^2 - \chi)(\gamma^2 - \gamma)$. Hunces var(x) is Note: covamance (xxx) Var(n) = \(\frac{2}{1-1}\)

tor X1 Y1 covariance will always be (+ve) For X1 YV covariance will be (-ve). (OV(X,y) = } (x-2)(y:-4) = (2-4)=(3-5)+(4-4)(5-5)+(6-4)(7-5) = 4+0+4 = 9)tre Hence (tre) covaniance Adv. of covariance: Disadr. of covariance. 1) Pelato, beto X & Y. i) Does not have speafit Limit Value () Pearson Correlation Coefficient: [-1 to +1] It has specific limit value Jx 17 = CON (X) Y) -> [-1 to +1] 1) mose the value towards +1, the more tre correlation 1 15. - (XIY) @ more the value towards -1, the more - We correlation it is -> (n,y)

what is use case?

-- Suppose you have 1000 features and you can't use out. For creating ML models.

Finding correlation had not to the second to the second

Finding correlation between features I tanget can help you to decide which features I more dependent or lated to target. Hence, you can drop feature whose correlation with target is close to zero.

Spearman Rank Correlation:

rs = cov ((R(x), R(4))

TR(X) TR(Y)

×	Y	R(x1)	P(
	2	. 5	5
3	4	4	4
5	6	3	3
7	8	2	• •
0	7	6	2
8			6