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### CCA Assignment - 3

Q Find T shirt size, given  
Height = 163, Weight(kg) = 62, T-shirt size = ?  
with KNN classification method with  $k=3$

Height (cms)	Weight (kg)	T-shirt size	$d = \sqrt{(x-x_i)^2 + (y-y_i)^2}$ (Euclidean distance)	$k=3$	T-shirt size of neighbour
158	58	M	6.40		
158	59	M	5.83		
158	63	M	5.09		
160	59	M	4.24		
160	60	M	3.60		
163	60	M	2	Consider	M
163	61	M	1	Consider	M
160	64	L	3.60		
163	64	L	2	Consider	L
165	61	L	2.23		
165	62	L	2		
165	65	L	3.60		
168	62	L	5		
168	63	L	5.09		
168	66	L	6.40		
170	63	L	7.07		
170	64	L	7.28		
170	68	L	9.21		

∴ The T-shirt size would be M for  
Height(cms) = 163 & weight(kg) = 62