Interview questions. enecoun : 89013109 1) What one Some Common hyperparameters of decision tree models, and how do they effect the model's performance? O. Thex oferth : 10 redner est stimed to * controls the maximum depthil thous * A deepen estable captaine posterne but can lead to overfilting. 1. Min Sample Split & Preveres unecessary splik and & The The minimum ent & requires to split and an enternal male. * Higher values Preval overfilting by Oppenfatting va underfatgeng grindens Bullin Sample et got leafter spread, Mond & leaf mode printificate to show a leaf mode murt Bookson. * A Smaller number reduces over filting and increases generalization rebut may also lower accuracy leaves: ted da Max Sectures theoret rolling * to the number of features to consider When cooling for the best split is Dicriterion: * william & giring theasure & imparity & priviled *

*entropy:- measure the information gain 18 24 MSE (mean squired Error): For regression desission thee models, and how do the O. Mex leafortoles? - Eldon ett dogge * limits the number of teats nodes. * Helps Prevent on Overfitting it by * enous Controlling street complexity good is & 1. Min Empurity Decrease: * Prevents unrecessory split and Controle overfitting requires too split and on enterinal node. Effect on Model Personance respit * Doverfitting vs underfitting private & Small, Longe, loon general lie under Bitting * large(max_depth), small (Min_sample_spit teads et overfitting hun dans food @ Bigs - vericonce thooleoff rellone A & It High depth & small constraints reduce bias but increase varionce and all * Regularization through constraints B'Computational Efficiency down * large trees oure more computationally expensive. * linailing & man leaf rooles improve efficieng

2) kithert is défferent between En Label Encoding & one-tuck encoding? 1) label - Encooling. * Assigns a unique interger category. Ex:categories: [Baran', 'Herri', 'Deepak'] Label Encoded: ¿ Sovian : D, Harri : 17 Gird moishaber property 29 noil Greeklo * Pro8:-* Simple & memory- efficient * Consideración descentes & widow somio Tropeses on ordinal orelation ship between collegories. Which may not be meaning Ful. * use case :-Les Soutable for ordinal collegorical variable, where order maker (but to figh) 2) One-Hot-Encoding: * convert each collegory into a separate binory column (00x1) calegories: ['Red', 'Orreen', Blue']

One-Hot - Encoled! drong Teb 20 dollar Red Britains Blue en l gridanis Dishel - Encoling. 0 proposition regretar sopre so argissa x ['dogeog' ! inoH' inorol']: 1900 godos Lobel Encoded: 3: Joseph : O. Horri : 1 * No ordinary relationship assumption. -: Box9 * * Simple & memory efficiens * * Increases dimensionality 4,000 * Jearlinghaleto lette curse of dinas inalig ed for thougestidates its regular regular meaning Fish. * we Case: # Duitable for mornical calegorital es was resorre relace sneeder, eldoiror (April 2) One Hot- Encoding: * convert each collegard into a separate (100) mulas granid [" 1 sul? ' 1 bod' 1 bol' 7 cor rector