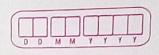
Name Deep Salunkha Roll. No: 21102 A 0014 BE CMPN A. Sub: ML Assignment-1 DI Describe a real-world problem that could be addressed wing ML Explain which tape of ML would be appropriate for this problem why = Real world problem: Detection of explanet Exoplanet are planets that orbit star outside our solar system Delecting and classifying exoplanet is crusial for understanding planetary system and the potential for life beyond Earth The appropriate Ml: Supervised. Reason : There are existing data sets with labeled examples of. light curves, where dips cowed by exoplanets have been manually identified by astronomers. These labeled dataset are coucial for togining supervised. I raming model.



Compare and contrast supervised, unsupervised and
reinforcement learning Provide example of algorithm
for each type and docuss scenarios where one
type might be more suitable thank other
O Supervised.:
Algorithms: -> Linear regression
> logistic regression
-> support vector Machin.
-> Decision tree 4 Random forest.
-> Neural notwood based Algos like (CNN)
The state of the s
Use Cases -> Image classification
-> Spam detection
-> Medical Diagnosis
-> Exponent Detection.
the section of the se
Pros -> High accuracy when trained on sufficient and.
representative data.
-> provides clear performance metric like accurage
precision and seral
cons -> Regums a larg amount of labeled data.
-> they not to useful in new type of data.
0
D Un suger Mars.
Algorithms: -> K-Means clustery
-> Ities archical clutering
- Principal Component and six.



Use cases: -> Customer segmentation	
-> Anomaly Detection	
- Dimensionality Reduction	
and and my har all to all as parter along the and and	
Pros : -> can work with unlabeled late	
-> burful for finding patterns in new type of date	۵.
8 1	
Cons -> Result can be harder to interpret	
-> No clear metal. for evaluation	
3 Remforcement learning	
was edle at astagnit to	
Algorithms > Q-Learny	
-> Deep Q- Learning	
-> Policy Goodien) method.	
and promoted (as a decomposition of the	
Me lases - Game Playing	
-> Robotics.	
- Autonomus vehicles.	
Nie ban Liono Iti	
1885 -> Can solve complex decision-making problem	
- Suitable for envisormal whose the optimal	
strategy can be learned through interaction	
(in) -> Requires a large number of interactions,	
which can be time-consuming and	
Computationally expenses	
7 Difficult to design 1	
7 Difficult to design houristic function that directs to desired	
TO doshid	



93]	Outline the steps mivolved in a Mil mode for house
40 3	price prediction.
	portarion grillanian and
- >.	1) Data collection: collect the Data for the
	house and their price by
	field neit or now recording data
grat	HER MILL BY MY STONES
	1 Poeprocusing: Handle missing values, normalise the
	neumerical trature etc
40	
	3 Model selection: choosing appropriate model is
	very importan, in this cax
	very importan, in this cax we will choose multiple line or regression
	@ Madel today Dride the labeled data in
	@ Model toping: Drick the labeled data in sortion (80-20) (training-testy)
	and staff toping it
	(1) + noded evalution: Once it is trained validate.
	it's accused and my
	the remaining 20%. data, we are various
	evalution matrix like. MAE, MISE ett.
	This was the agree of the same
	And an in and our agest a desired to an
	the property of any district
	Example Library Land
	and the state of a part of the state of
	Think is don't had?