Assignment 03

	Name: Kiran K. Patil Sem: 06
	10: 211070904 course: ML-Lab.
	Aim: Implement candidate Elimination Algorithm
	on the titanic dataset.
	and the state of t
0	Theory: The candidate elemination algorithm
	incrementally builds the version space given a
	hypothesis space H and a set E of examples.
110	The examples are added one by one, each
	example possibly shrinks the version space by
*	removing the hypothesis that are incosistent
	with example. The candidate elimination algorithm
	does this by updating the general and specific boundry for each new example
,	specific boundry for each new example.
0	
	· You can consider this as an extended
	form of find-s algorithms.
	Capidos bolt - militar in 1
	· Consider both positive and negative example
	Achielle prolibing quemples as and b
	as Find-s algorithm
	(Basically they are generalizing from the
	Specification
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	· while the negative example is specified
THE STATE OF	form generalize form.
	J
	Terms Used:
	and successful the show have foreigned to be a
	· consept learning! consept learning is basically
	learning task of the machine learing
	heneral hypother's! Not specifying features
	to learn the machine.
1	is to be but the give topytoned
	6 Co & p; 121, 121-12 & Number of attr.
	er andred the Mainte fidicity bigares is in
7.42401	· specific hypothesis: specifying features to
supply	learn machine (specific Realury)
1.7	Thereporth parting of the soft
	· 8, d'pi', 'pi', 'pi',g. Number of Pi
	depends on number of altributes.
1.97	retexting a long water with a some and a south the
	. Version space: It is intermediate of
	general hypothesis and specific hypothesis
	it is only just written and hypothesis but
	a set of all possible hypothesis based
	on training data set
	A Company of the Comp
(4 (1)	

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	Algorithm:						
	Step 1: Load Data 8et.						
	step 2: Inftialize General hypothesis and						
	specific Hypothesis.						
	the state of the second						
0	step3: For each training example						
	8 tep 4: 12 example is positive example						
	if attribute value == hypothesis_value						
	· Do nothing.						
	else:						
	relptace attribute value with '?'						
	(Basically generalizing it)						
	steps: If example is Negative example:						
	Make generalize hypothesis more						
	specific.						
	Operations / proposecessing:						
	and replace moderations whether with his which the public of the						
	4 Removed unnessesary columns						
	- d.f.doop (['cabin'] Name' Passengerld'] axis:1, in place-true)						
ot in the Wa	and the second of the second o						
	in the horizontal harmonic in the second						
7 7 11 20 11 11 11 11 11							

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el classified age as categorywise.

infant: 0.5, child: 10, teenager: 18, roung Adulf: 25,

Adull: 40, Alderly: 80.

I cassified fare category

General, second class, first dass.

61 classified siblings count

Low in medium of High. It have

I get the target attributes as servived / - 0, 1.

natural door rolling by

dartaset is looking as:

8)	survived	बढ्ड	phones	Peach	Einholthed	Age	Fare	sibsp	
	0	male	3	0	9	Adult	Gen	low	
	Moudi	Female	237	0	2 1 5	Elderly	Gen	Low	
1-1	Q ,	male	2	/O/	9	Elderig	Cren	Low	
. 27	0	male	3	a	S	Adult	Pen	(mu	
		female	3	, ,	S	Young Ad	y Gen	low.	

I Then applied the condidate elimination algorithm.

· specific -algo: ['?', o, '?', male' 1, 1, 2, general]

" cremeral algo: [? 0 ? ? ? ? ?] [??? ? rmate ? ???

conclusion: Thus we have applied condidate elimination algorithm an filtered dataget and it is observed that on fildberted datage, we get constraint hypothesis

