## Decirion Tree palgonithms: bushuste pod oinstos

Outland		with wheeler who 12	IN 59 M	. doubter
Outlook	Ocmparature	Humidity"	neindy <sup>03 M</sup>	hours plane
Rainy	hot:	high 3 of	false	2811103
Rainy	hot 2	high + F	True 38	30 No.03
Owreast	mild	nigh	True	1122,000
Sunny	mild.	- high	j ofalse =	(+ w) (50) a
Sunny	cool	Inigh Non	false	52
Sunny	Cool	normal	True.	23
amrait	Countly	othermal 12	Trueson	mulayi3 mat
Rainy	mid 13	wigh 3	false	35 A
Roiny	cool 1	Normal	false*	580
Rainy	mild a	Normal	Prive CIO	48
Sunny	mild	Normal	false,	(946)02
owycent	not in	high	4else	44
owncut	hot	Wormal	fell (	ay
Sunny	mid	righ	True	30

remination exiteria is every played in 9.32 unit

TO (Hamiday) = 1/4 × 4-30 4 3/4 × 8 + 2 = 9 1.5

\$4.0 = 0072

## calculation of standard deviation of teatine coloumns:

outlook	Meanbrick	-84d. pleviation	count on	State of the state of
&c nny	39.2	10.84	5 1111	Painy.
Rainy	38.2	7.78 pm	<b>5</b> 10 4	W.729
overcost	46.25	3.49	4 000	CHERCON

remparature	Mein T	efd-deviation	Country	ALL DELICATION OF THE PARTY OF
hot	36-25	8-95.1	4 E/m/	į vasi
Cool	39	10.51,00	4 100	Review
mid	92.60	7.65	6 b 1/1	price

SD(temp) = 
$$\frac{4 \times 8.95}{14 \times 8.95} + \frac{4}{14 \times 10.5} \times \frac{6}{14 \times 10.5}$$

$$= 8.84 \quad \text{larger} \quad \text{far} \quad \text{targer} \quad \text{far} \quad \text{targer} \quad \text{some} \quad$$

Humidity	Mean	std. deviation	Count (n)	
High	37.57	9-36	7	
Mormal	4210	8.73	07 07 b 13	mb

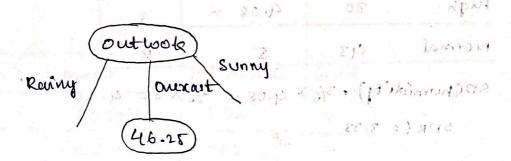
sn (reumiding) = 714 × 9.36 + 714 × 8.73 = 9.05 snr = 0.2+

Windy	Mean	std. deviation	count chy
True	34.66	10-59	-1786 m
false	41-37	4-81	08

SOR = 0-28; 07 318 + 0x 31/ + 2 15 7 316 1 (4 10) 02

+ outlook becomes not node (high SDK)

vith output as mean of overcauts he walnes is 46125 med



For outlook Rainy:

J. 1.3

(whow)

mean still de

windy

Temp.	Humidi H	neindy	hour played	. 2163
Hot	high	-false	ag 25 inship	that gone
. hot	high	false True	30	as ref paras
mild	high	falre	35	ino jo endi
cool	Normal	Jalre	38	10 200
mild	Normal		48	

SD(howe played) =7.78

6-11-

75.0 N

2.15

-> calculation of std. deviation to find the next node on Outlook Kning,

	on shows o	std. devation	12 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Temp.	mean.	std. dev	count cn)
hot	27.5	2.5	02
cool	32	Ø	2
mild	41.5	. 6.5	1- 12- 01 K

SOCtemp): 4502.5 +16-70 + 45 x6.5=3.6

SDR = 418

humidity: Mean stdoderiotion count with the treated with the Normal 43 5 2

SDChumidity) = 3/5 × 4.08 + 2/5 × 5 = 4.45

Windy	mean	std. dev.	counters)
True	39	.9	2
False	32-66	W. S. I.A	13 John

Par outbook Parmy:

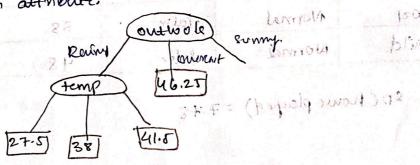
SHIT

Felse

r budbook becomes more ando things stopy

1 phr was 2

temp. has highest spr. it becomes the next node on the kning branch of outlook and the leaf mode is adoled with mean value of each attribute.



Temp.	humidity	windy	how played
naid	htgh	-false	45
cool	Normal	-false	52
Cool	Normal	Trac	23
mild	Normal	False	46
Mil d	wigh	Trme	17 30 Ben
	to review .	d cuide with	Military Market

so (hows played) 20.87.

+ Calculation of std-deviation to find the Next Nodo on outlook sunny.

Temp.	Mean.	stel device	Court
mild	40.33	7-32	3
C001	37-5	14.5	2

sp(+emp) = 3(5 × 7-32 + 2/5 × 14.5 = 10.19 spR = 0.68

Homidi H	Mean	Hd-deviation	bount
high	37.5	7-5	2
Normal	40-33	12.5	3

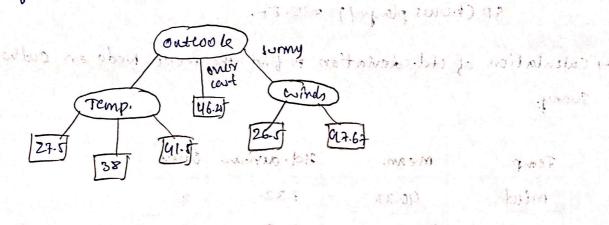
SOCHumidity) = 2/5×7.5 + 3/5×12.5 = 10.5 SOR = 0.37

LACE SOM MO 10

Windy	Mean	stde dev.	count.
True	26.5	3.5.1.1.	2
falce	47.67	3.09	3

I weindy have highest SDR. it becomes net node on sunny branch and all the attributes raticty the termination criteria.

. Leaf node are is added with mean name as ofp.



11. 11 = Tours 12 = 12.12 + 12.14 = 11.14

230 = 9.32

Handely Many Habarian book
high 1315 45
high 1003

201 = 101 A De 1 Jet Det De 2 (14 2) Monard DOS.

F 10 1 4 4