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In [1]: import pandas as pd
df = pd.read_csv('D:/aiml.csv')

def get_result(percentage):
    if percentage >= 80:
        return "Distinction"
    elif percentage >= 60:
        return "First Class"
    else:
        return "Pass"

def check_subject_result(row, subject):
    passing_marks = 40
    if row[subject] >= passing_marks:
        return "Pass"
    else:
        return "Fail"

passing_marks = {'maths': 40, 'science': 40, 'social sciece': 40, 'kannada': 40, 'hindi': 40}

df['Total Marks'] = df[['maths', 'science', 'social sciece', 'kannada', 'hindi']].sum(axis=1)
df['Percentage'] = (df['Total Marks'] / 500) * 100

for subject in passing_marks.keys():
    df[f'{subject} Result'] = df.apply(lambda row: check_subject_result(row, subject), axis=1)

def check_passed(row):
    for subject in passing_marks.keys():
        if row[f'{subject} Result'] == "Fail":
            return "Fail"
    return "Pass"

df['Result'] = df['Percentage'].apply(get_result)
df['Passed'] = df.apply(check_passed, axis=1)

print(df)
```

	Name	Reg no	kannada	english	hindi	maths	science	\
0	anil	110cs22301	58	84	44	44	85	
1	akhil	110cs22302	86	53	52	89	50	
2	adithya	110cs22303	53	55	52	52	54	
3	chethan	110cs22304	55	55	51	52	91	
4	karthik	110cs22305	55	95	41	85	15	
5	sanath	110cs22306	45	85	85	52	15	
6	shashank	110cs22307	48	56	83	63	82	
7	tharun	110cs22308	78	26	83	52	52	
8	mithun	110cs22309	89	53	25	52	85	
9	lathesh	110cs22310	96	58	45	55	85	

	social sciece	total	Total Marks	Percentage	maths Result	science Result
0	85	400	316	63.2	Pass	Pass
1	61	391	338	67.6	Pass	Pass
2	51	317	262	52.4	Pass	Pass
3	55	359	304	60.8	Pass	Pass
4	81	409	277	55.4	Pass	Fail
5	58	377	255	51.0	Pass	Fail
6	42	374	318	63.6	Pass	Pass
7	54	372	319	63.8	Pass	Pass
8	75	412	326	65.2	Pass	Pass
9	42	381	323	64.6	Pass	Pass

	social sciece Result	kannada Result	hindi Result	Result	Passed
0	Pass	Pass	Pass	First Class	Pass
1	Pass	Pass	Pass	First Class	Pass
2	Pass	Pass	Pass	Pass	Pass
3	Pass	Pass	Pass	First Class	Pass
4	Pass	Pass	Pass	Pass	Fail
5	Pass	Pass	Pass	Pass	Fail
6	Pass	Pass	Pass	First Class	Pass
7	Pass	Pass	Pass	First Class	Pass
8	Pass	Pass	Fail	First Class	Fail
9	Pass	Pass	Pass	First Class	Pass

In [ ]: