

Ans:-

Reg:- 2019831056

Given that,

State	$h(n)$	State	$h(n)$
Arad	366	Mehadia	241
Bucharest	0	Neamt	234
Craiova	160	Oradea	386
Drobeta	242	Pitesti	100
Eforie	161	Rimnicu	193
Fagaras	176	Vilcea	80
Giurgiu	77	Sibiu	253
Hirsova	151	Timisoara	329
Iasi	226	Unziceni	80
Lugoj	244	Valui	199
		Zerind	374

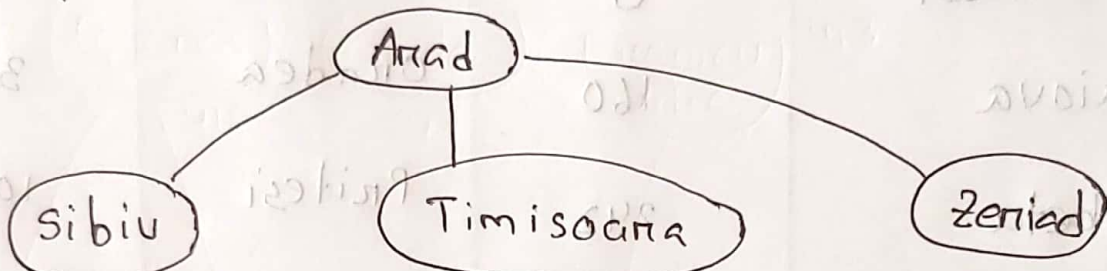
Steps to go Bucharest from Arad:-

Step-1:-

Arad

$$0 + 366 = 366$$

Step-2:- From expanding Arad,



$$140 + 253 = \boxed{393}$$

minimum

$$118 + 329 = 447$$

$$75 + 374 = 449$$

Step-3:- now expanding sibiu



$$140 + 140 + 366 = 646$$

$$140 + 99 + 176 = 415$$

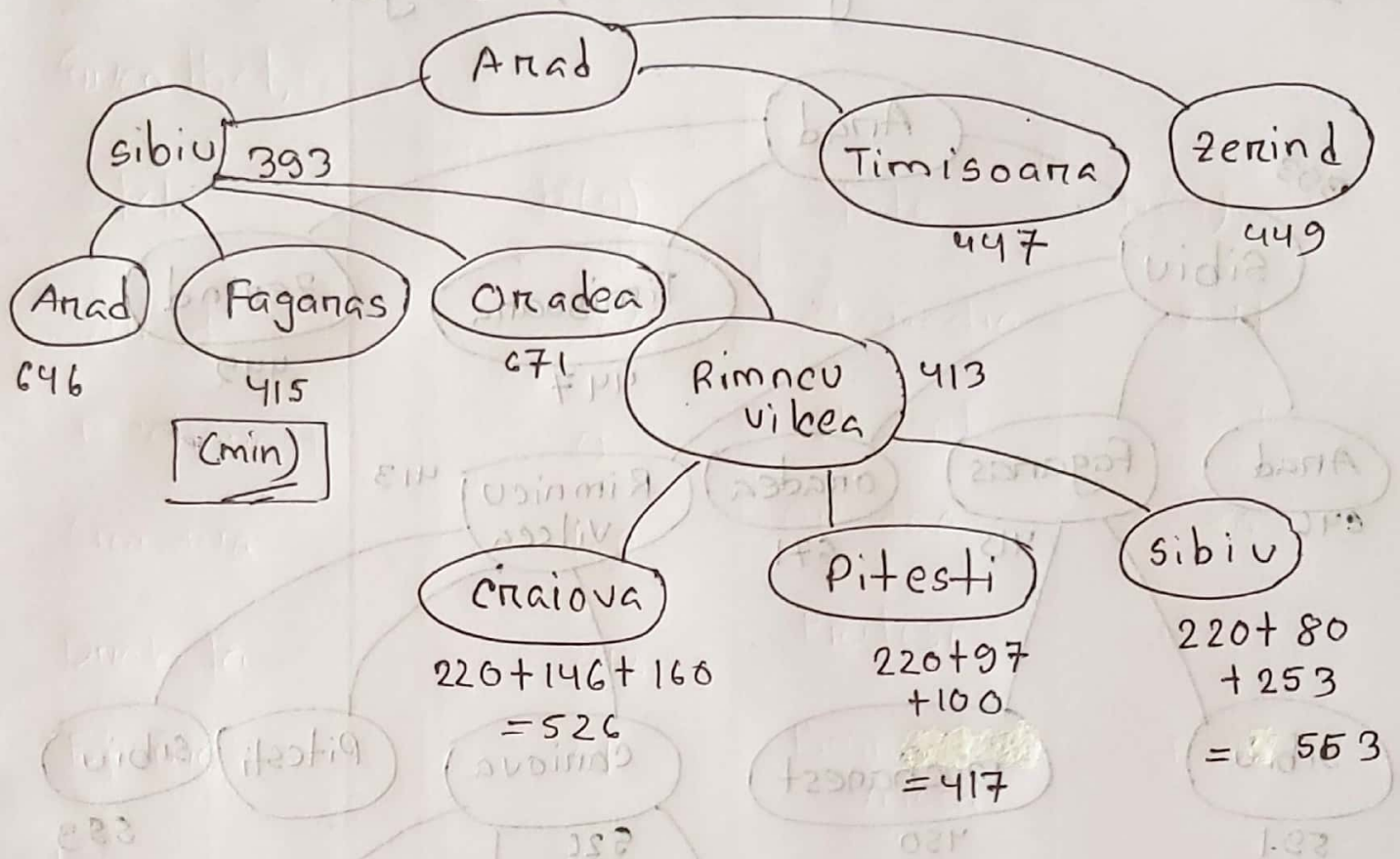
$$140 + 151 + 280 = 671$$

$$140 + 80 + 193 = \boxed{413}$$

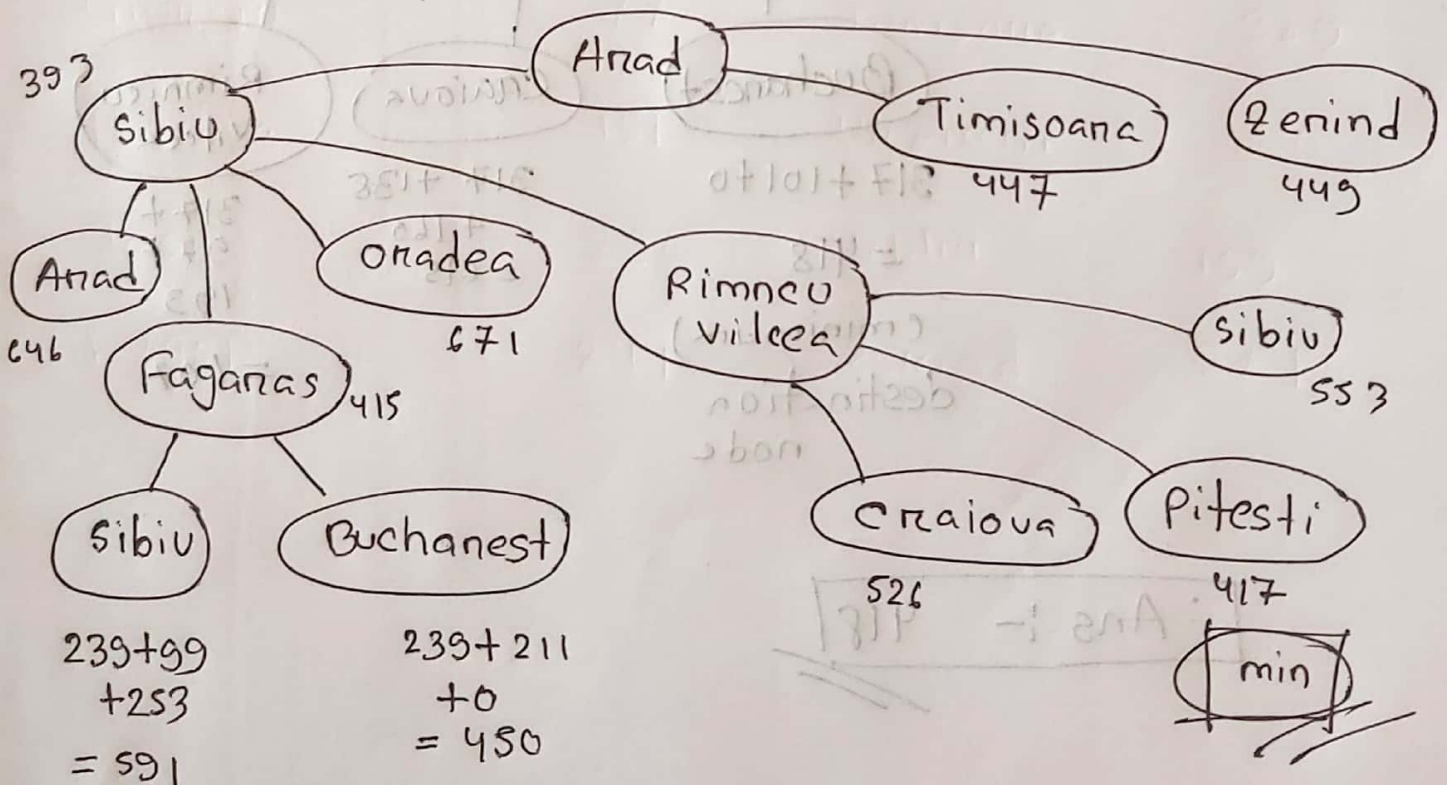
minimum



step-4:- Expanding Rimnicu vilcea, we get

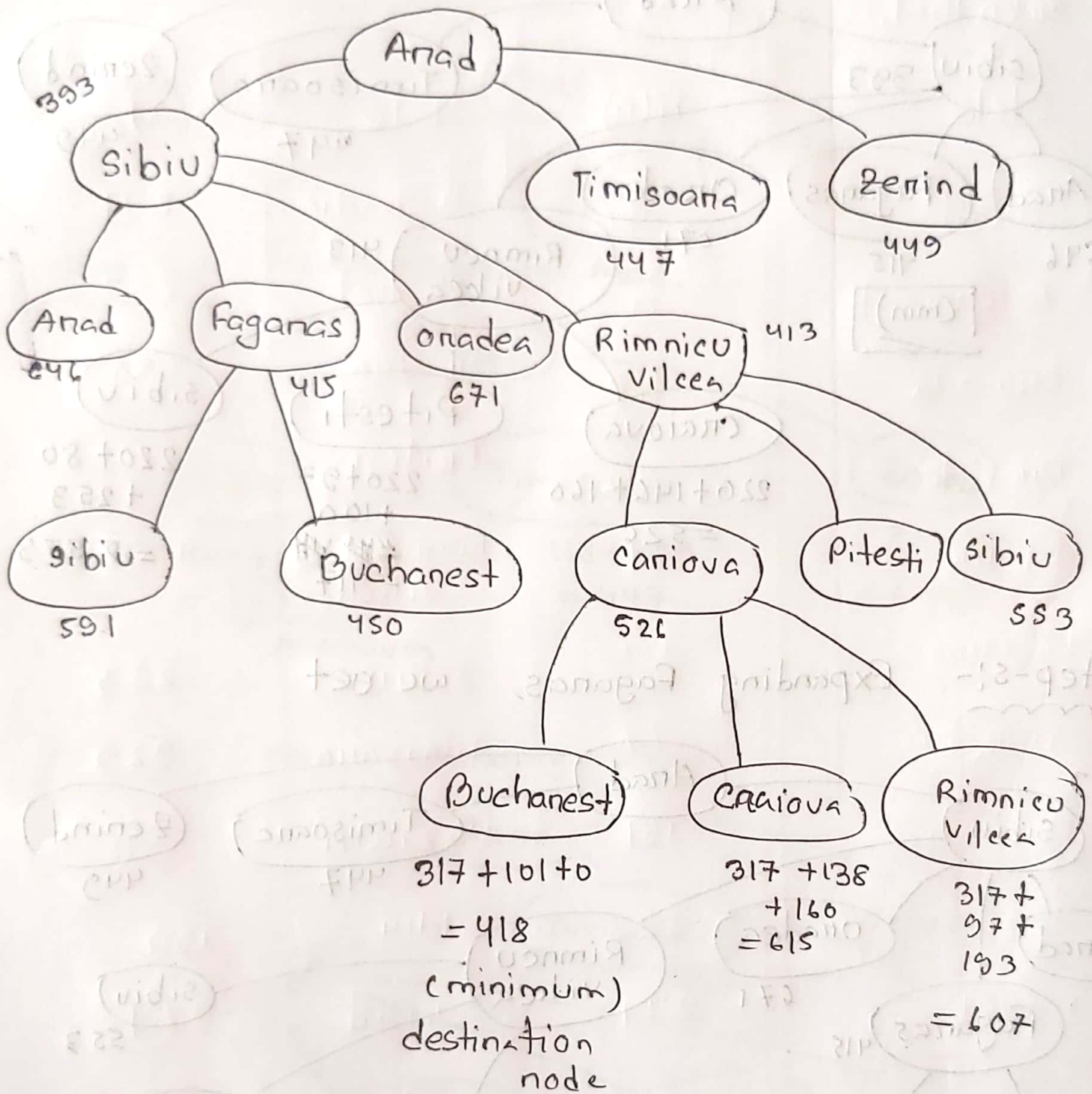


step-5:- Expanding Faganaas, we get



Step-6

Expanding Pitesti, we get



Ans :- 418